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Farm Department.

Conducted by J. H. Brown, whose farm is conducted as the Michigan Farmer Experiment Farm. All correspondence for this department should be sent to Battle Creek, Mich.

THE EDITOR'S FARM NOTES.

TO STUDY LIVE STOCK HUSBANDRY.
So many times we have wished we could have had the educational advantages, when we attended school, that the young people on the farm have at present—even in the district schools. The text books, methods of teaching and school apparatus are so much superior that it almost seems impossible that any pupil can resist the temptation to secure a liberal education "in these times."

For two winters we have tried to arrange our business matters so we could take the course in Live Stock Husbandry under Profs. Smith and Mumford at the Agricultural College. We are still "cogitating" over the matter, and know we should greatly appreciate the opportunity.

There is not a farmer in the country but would appreciate the benefits which would accrue from knowing how to select, breed and feed his stock more intelligently, economically and profitably than ever before. Improvement and competition make these desirable conditions still more necessary as the years go by.

This one course has eight different lines of instruction that interest us more than anything else, because we wish to become a specialist in this work, which must include correct theory as well as practice. We have had more or less of the practice on the farm ever since we were born, but the theoretical portion, well "worked in," is essential to produce an "expert."

WE WISH HUNDREDS OF OUR BROTHER farmers, who are live stock breeders and feeders, could go with us into the yards at the Experiment Station when the instruction in stock judging is given to the boys. Many of you who annually witness more or less of the so-called judging of stock at local and district fairs, know that it is sometimes a regular farce.

We have often seen farmers standing around a ring containing a few specimens of cattle, sheep or swine, which were being judged by an expert. Nearly every farmer would be glad to learn from this expert wherein one animal was better than another in certain points, and the reasons therefor. By the use of the score card, with a scale of points, this work might be made very entertaining to the farmers present.

We hope to see this done at many of our future fairs where live stock is exhibited. Plenty of experts can be procured from present and future students of Live Stock Husbandry at M. A. C.

FROM A YOUNG MICHIGAN FARMER READER.

I am a single man, 23 years old, and have always lived on a farm, except

during one year teaching school. Expect to take the special course in Live Stock Husbandry at the M. A. C. the coming winter. You may hear from me again. I expect to attend the institute at Lacey and will represent you at that place, if you desire.

C. N. E.

We know you will always appreciate your decision to take this special course, for it will undoubtedly cause you to reach up to greater heights still unattained.

Certainly The Farmer wants you to represent it at the institute. Write the Detroit office for material. Also be sure to write an occasional article for

Agriculture has sent out circular No. 31 on the question, "Must The Farmer Pay For Good Roads?" This circular was first published by the League of American Wheelmen, and is adopted by the Department.

Being a member of the L. A. W., we read this circular some time ago and have believed in the following ideas, as promulgated by the chairman of the National Committee:

The League of American Wheelmen maintains that those who profit by an improvement are the ones who should pay for it. We maintain that every one using a highway should contribute in a proper measure to the cost of its

A friend says that the railroads might just as well ask the taxpayers to pay for keeping up their road-beds. That's just what we taxpayers have been doing—indirectly—and we could not kick if we could have free rides over the track.

We have not room enough to publish this full report in The Farmer, but every farmer interested should write the Secretary of Agriculture, Washington, D. C., for circular No. 31, of the Office of Road Inquiry.

To show how the roads are sometimes used by those who pay no taxes to maintain them, we append what John Gould, of Ohio, has to say in a recent issue of Rural New-Yorker:

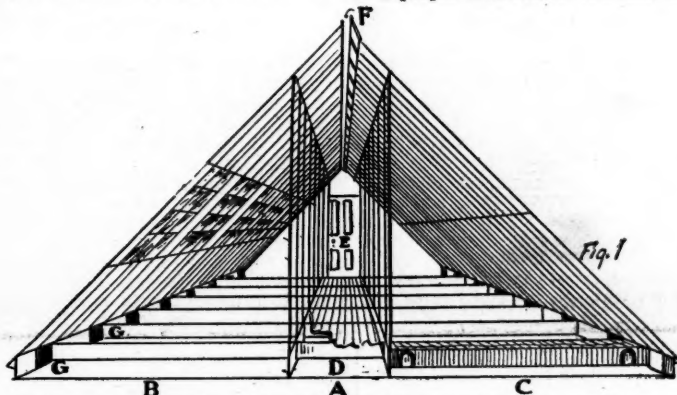
A new phase of the road question has presented itself here. The township voted to make several sections of broken stone road, covered with gravel. The cost was about \$3,000 per mile, and the road was considered a great improvement over clay roads, and it was resolved to keep on making other sections. This fall, a ship-timber company purchased a tract of oak timber, and hauled it tree length on great trucks, with six teams attached, over the greater length of this experimental road. Many of the logs weighed ten tons or more. The result is that the road is ruined, is so nearly impassable that the logs are now drawn on a roundabout dirt road. What is the remedy? Is it possible to collect damages? If not, what is the use of building roads where non-taxpayers, and those who do not care a continental about roads, can, without let or hindrance, destroy them? What right have the country people to have anything, anyway?

For the Michigan Farmer.

MAKING BUSHEL CRATES.

If Mr. Albert Murphy, of Virginia, will refer to The Michigan Farmer of November 21, 1896, on second page, he will find an article by I. N. Cowdrey, fully explaining a method for making bushel crates. Further comment and suggestion is given in the issue of December 25, 1896. I followed Mr. Cowdrey's plan in making crates for myself and neighbors, and have made and sold enough so that my own came comparatively free from a cash outlay.

In case our friend has not the particular issue to refer to, I would advise him to get water elm plank, two inches thick. Each crate will require 13 pieces 18 inches in length and 8 pieces 14 inches long for sides and bottom, four on each side and end, and five on the bottom. For corners, stuff should be sawed 1½ inches square and ripped corner-wise, so that pieces will be triangular, and cut one foot in length to nail the side and end slats to. For bottom corners use inch square stuff, cut in between the posts to nail bottom to. Use three-penny wire nails. Make ends first by placing four of the triangular pieces the right distance apart and nailing securely to a solid bench. Nail the slats, three nails in each end, and then set up endwise and nail on side slats. Now put in the bottom corners and nail to lower end slat inside. Nail five slats on for bot-



A CONTINUOUS POULTRY HOUSE—See description on page 449.

The Farmer. What about your dairy experience on the farm?

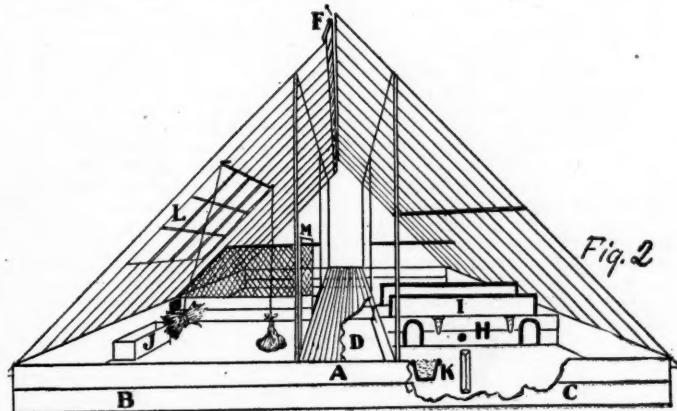
TANK HEATERS.

I have read what you said regarding tank heaters in The Farmer of November 19 and heartily concur with you. We used one last winter and derived satisfactory results.

But now we have a straw stack too close to the tank, so are afraid to put it in on account of sparks. I would like to know if any one of the readers of The Farmer has ever tried or even seen a heater heated by oil. If so, would like to know results. Have read The Farmer for a long time.

For two winters we have used our tank heater in a tank set about 40 feet from the straw stack. We use soft or Jackson Hill coal. There is a fine

improvement. The farmer is not the only one who uses country roads. They are traveled by the country merchant, the itinerant peddler, the village doctor, the commercial salesman from the city, traveling by team to sell his goods to the cross-roads country store, and, to a greater or lesser extent, by the entire people, not to omit, by any means, the wheelman himself. We feel, therefore, that if our roads are to be improved for the benefit of all these people, they all should bear a share of the taxes necessary to be levied for the purpose. And it should be remembered, too, that the entire city population will be benefited by the improvement of country roads, not only those who travel them, but all others as well. For, if the farmer, by having better roads, can save in the transportation of his produce, and can afford to sell



screen over the end of the smoke pipe, and no sparks were ever seen to issue therefrom.

We also have used a small oil heater, heated by a double burner kerosene oil lamp. This did very well for awhile, but soon began to leak and we gave it up.

WHO SHOULD BUILD AND MAINTAIN COUNTRY ROADS.

The United States Department of

it cheaper in the city; or, on the other hand, if a saving in its transportation gives him a larger margin of profit on what he sells, with more money to invest in the things supplied by the city, this results in indirect benefits to the city population.

We believe some form of a State tax should be levied upon all property and all classes of people alike, in order to produce and maintain good roads. Country roads are free to all people.

tom and your crate is complete. Each crate requires 27 pieces.

The planing mill here saws the stuff for three cents per crate, the customer furnishing the plank. They are well worth the trouble and expense. I have used them for two years and should not know how to farm without them.

Ingham Co., Mich. J. W. BUTLER.
(We are securing a sample collection of all the crates we find in use on Michigan farms, and shall make a sketch of them when complete. There is one made with a curved bottom, but we have not used it.)

There is so much interest in bushel crates that more readers of The Farmer will probably use them next season than ever before.—Ed.)

For The Michigan Farmer.

THE WORN-OUT FARM.

A long abandoned farm is not so difficult to restore to good fertility as one that has been worn-out by successive cropping by a man who does not understand his business, or who in hiring the place from another does not care how much the land is robbed. Many farms that have been left idle for several years have to a certain extent restored some fertility to the soil by the natural processes. That is, leaves, vines, stalks, and even weeds will add a certain amount of humus and nitrogenous matter to the soil each year. If such land is plowed twice a year, so that the soil can digest and assimilate the plant life that has accumulated there, it will be found to be in a fair way to recuperate.

It is not such a difficult matter to restore a run-down or worn-out farm as some people imagine. It simply requires a little practical and scientific knowledge put into operation by a man who isn't easily discouraged. Many a poor man has made his mark in farming on just such worn-out farms. It is possible to-day for a farmer to take a worn-out farm, and build it up to a paying basis, supporting himself meanwhile. Farms of this character can be purchased reasonably cheap in many parts of the country, or they can be rented for a long term of years, with a renewal clause attached.

The first thing to do in restoring such a farm is to get a crop of some green stuff. In my experience I have always found that it is easy to start a crop of oats by fall plowing, scratching the ground just enough to cover the seeds a little. Then by the following spring when the oats are up they should be plowed under. This makes a good starter, and then by adding crops of grass and clover to the oats the soil will soon get the nourishment that it has so long lacked.

In most worn-out farms the soil is stiff and hard, and during dry weather the surface bakes so hard that it is difficult to force a plow through it. There are two remedies for this. One is to work more plant manure in the soil, which makes it more porous, and the other is to underdrain it. If the soil does not respond to the former treatment in the course of time underdraining must be resorted to anyway. Too little attention is given to this on most old farms, especially where the soil is a tough clay.

Plowing often is one of the best methods for restoring the lost fertility of any soil. It works well either when the soil has too little plant food in it, or when it is overcrowded with humus. It enables the soil to digest the food, releases much that is imprisoned in it, and stores up nitrogen from the air. Not only fall and spring plowing, but summer plowing, too, is required on some farms that have been allowed to run down. Such work will often take the place of commercial fertilizers and barnyard manures, although all of the latter that one can possibly secure should be mixed up with the soil at every plowing.

Minnesota. A. B. BARRETT.

AN APPLICATION OF CRUDE POTASH.

Would the crude potash, as extracted from wood ashes, be too strong to apply direct to growing crops? If so, how should it be treated to apply?

Benzie Co., Mich. JULIUS FOLGER.
We referred this question to Dr. Kedzie, who replies as follows:

Crude potash from wood ashes "applied directly to growing crops," that is to the leaves, would be injurious, as the solution would be too strong. That is not the way to use potash, because the plants do not take in potash by their leaves, but absorb it from the soil by their roots. Mix your wood ashes with the soil and the plants will do the rest.

For The Michigan Farmer.

ENDORSES PETROLEUM FOR PAINTING.

Geo. B. wishes to hear about petroleum for painting purposes. Five years ago last summer I painted my house and barn. For the house I used white lead and pure linseed oil with a little coloring. The barn being weather-beaten I used one part linseed to two parts raw petroleum, thickened with yellow ochre, for the first coat. As I wished to have the barn similar in color to the house, for the second coat I used one part linseed, two parts raw petroleum, thickened with white lead and coloring, with which I painted the two ends and north side. Having some misgivings, I painted the south side (it being the side next to the road), with the same as used on the house.

To-day the house and south side of the barn need repainting. It rubs off, or "chinks," while the petroleum paint does not, but has a smooth, hard surface, good for 10 years yet. It takes much longer to dry than clear linseed, but give it the time and it will dry and get just as hard and firm as the best linseed, with a more glossy finish.

Clear petroleum penetrates the wood and leaves the paste on the outside to rub off and never dries, or you will think so if you try it, while it forms scarcely no protection to wood.

Lapeer Co., Mich. E. E. O.
(Quite recently we saw a building in a northeastern county that had been painted in a similar manner. It presented a good, hard finish, after two years' use, and did not "chink," even when severely hand rubbed.—Ed.)

For The Michigan Farmer.

HAY-LOADERS.

What I have to say in regard to the hay-loader will be supplementary to the excellent articles of C. P. Reynolds and L. D. Watkins. Were I to criticize anybody, it would be our editor, when he says: "On the average farm the hay-loader is a useless expense." Or, perhaps, friend Watkins, when he says, his loader is often run at the rate of a load in seven minutes. That is from 75 to 100 loads per day. I have found thirty to forty loads a day plenty for three teams and five or six men, with a boy to drive teams in the field and another to drive team on the sling rope. I confess that some of my barns are too low for the rapid use of the slings.

But I understand the criticism of our editor to mean that the hay-loader is an unwarranted expense, except under certain conditions. It is my purpose to state briefly the essential conditions for its economical use. First, a man must have conveniences and machinery for unloading. The loader does not load the hay in any shape to pitch off by hand. Hence, if the hay must be pitched off by hand, the time saved in loading will be lost in unloading. The horse fork can be used; but I must prefer the slings. Between now and winter, while the barns are full, is the best time to put up the tracks for use another year, as it can be done with less expense and danger.

I may say that it is not absolutely necessary to have barns for the use of slings, as by means of wire cables and a car for use on same, I have used my slings largely for stacking hay, clover seed and beans.

Second, standard wagons are too high for use with loader. One should use truck with about a 40-inch wheel in front and 44-inch behind, making a very serviceable general farm truck.

Third, the racks should be of the flat type, about 7½ feet wide, and 14 or 15 feet long. Rear standards 4 feet high, with a one-foot board across the top, rounded at the ends to be out of the way of the loader in turning. If slings are used, the front and rear standards should be provided with the proper hooks and notches, so that the slings can be instantly put in place in loading, and found when unloading.

Fourth, and most important of all, a man ought to have a side delivery rake to use with a loader. This is a tool little known on the average farm, but so essential and necessary to the rapid and economical use of the loader that I did not think best to purchase a loader until I had procured a rake of this type. This rake follows the mowers as soon as the swath is partly dry, raking two swaths into a continuous winrow around the field, at the same time turning the hay over and leaving it in a light fluffy winrow, in the best possible condition to dry, as well as to be picked up by the loader. It almost entirely does away with the use of the tedder, thus combining two operations

into one. In case the hay is light, the winrows can be made any desired size by so driving as to roll the first raking farther in, and repeating the operation, if necessary. If it is still too small, by driving in the other direction around the field a certain number of swaths can be raked out from the inside, closing up a winrow exactly as was done with the old-fashioned hand rake.

The great advantage of the side delivery rake and loader is that they secure the hay in the best possible condition, at a minimum cost and risk. When we realize that a gang of men, with three boys, by the aid of these tools and the slings, will secure hay nearly or quite as fast as they could put it into the cock without them, we see the advantages of their use.

Oakland Co., Mich.

L. R. HUNTER.

REPLIES TO CANADA THISTLE QUERY.

A. R. asks in Farmer of November 19 how to kill Canada thistles. Our way of attack is to put the field in corn, or any cultivated crop, give it thorough cultivation, going over this patch every two or three weeks with a hoe, cutting all thistles off two inches below the surface. Have killed small patches in one year, and two years will fix the worst patch. Had one patch of about an acre which had kept spreading until we planted it to corn two years; now we cannot find a thistle.

Allegan Co., Mich. H. A. SHEFFIELD.
Saw A. R.'s inquiry in a recent Farmer for ammunition for bombarding Canada thistles. I had a patch that I wished very much to get rid of, so used refuse salt on them liberally and thoroughly.

Cut in July and August when the stalks are hollow and before they seed; salt as fast as you cut or you may lose some of the roots. It is a good plan to go over the patch two or three times to get the little ones that may be coming up. If one is thorough they can be killed with two or three saltings.

A local firm of whole salt grocers sent for twelve tons of refuse salt for myself and half a dozen neighbors. It costs here in the car about \$3 per ton. It comes in bulk and is much stronger than barrel salt. This was quite clean. We are using it for stock; think it is cheaper and just as good as lump salt.

Eaton Co., Mich.

ARTHUR E. FOX.

For The Michigan Farmer.

SEED GROWING AND CO-OPERATION.

There are so many good seedsmen in the market to-day that there is a danger that the average farmer will get out of the good old practice of experimenting in seed-raising on his own account. Nothing has helped agriculture so much as the individual work of raising and selecting seeds for the improvement of farm crops. It is a mistake to abandon this work. We may depend upon the professional seedsmen for the bulk of our seed, but we should never let the modern system rob us of the pleasure and value of experimenting with seed-raising on a small scale. In ever community there should be mutual co-operation in this way.

For instance, I noticed last summer a peculiar tomato vine which produced very fine, elongated tomatoes, of a deep crimson, and very solid. The vine appeared different from any other in the field. I collected the seeds, and shall try to raise the plants from them next summer. If I should succeed in producing a new type of tomato that answers well in this vicinity, I shall give the benefit of my experience to my farmer friends hereabouts, for the simple reason that they are on the lookout for similar improvements. One of my neighbors is experimenting with a new white onion that I hope to profit by some day, and another is interested in a variety of potato never before tried in our section. We all belong to a mutual experimental society by which all profit.

There is an endless amount of pleasure obtained from this work that an outsider cannot appreciate. One encourages another to improve the crops, and it is astonishing how much one keeps on the lookout for superior plants to select for raising seeds. Not only this, but we are indirectly helping towards the grand aim of agricultural science. We are modest in our views, and do not expect to produce some new variety or novelty of plant that will revolutionize agriculture, nor ever bring us in great pecuniary reward, but we are satisfied if we can

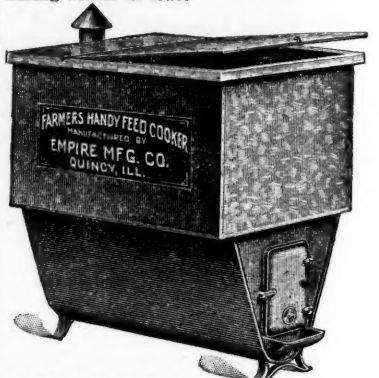
help each other to produce better and larger crops, and find out the best variety of plants suited to our particular soil and climate. That is about all any farmer can do besides making a comfortable living and laying aside enough for the proverbial rainy day.

New York.

C. W. JONES.

Farmer's Handy Feed Cooker.

Reader's attention is called to this device, which is sold at \$12.50 for 50-gallon capacity. By feeding poultry and animals cooked food during winter at least



one-third of the feed is saved; also having stock in a healthy condition, preventing hog cholera among your hogs and insuring the hens laying freely during the winter months. On application to the Empire Manufacturing Co., Quincy, Ill., a catalogue giving full description may be obtained. They are made in all sizes.

FOR SALE,

1,200 Acres Beautiful Blue Grass Farm.

Enormous Bargain. Compelled to Sell.

Level, very rich, deep soil; no rocks; shape nearly square; 800 acres in cultivation; 400 acres in blue grass and timber; can use machinery on nearly every acre; magnificent cisterns; several fine springs and large crystal creek runs through this place; this farm is in the far-famed blue grass belt of Middle Tennessee; modern improvements in best condition; 10 rooms, 2½-story brick residence; 22 tenement houses; 3 barns, 1 ginhouse; rock fence around large part of farm, and cross fences; 200 yards from trunk line railroad. No prettier, better improved or more productive farm in the South. Very healthy, no yellow fever, malaria or like complaints; prettiest climate in the world; high-class, rich neighborhood; near good schools and churches. Considering the many merits of this farm it is, no doubt, the cheapest and best farm in the South. You pay for value of the improvements and get the land free or pay for the value of the land and get the improvements free. A prospective buyer to see this is almost equal to a purchaser. Improvements alone cost over \$25,000. Will sell for \$33,000, third cash, balance 1 to 5 years; 32-page farm catalogue free, describing and pricing a large number of Southern farms, both small and large.

References—Fourth National Bank.
City Savings Bank.

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Live Stock.

CONDUCTED BY ROBERT GIBBONS.

Address all correspondence to Michigan Farmer, Detroit, Mich.

For The Michigan Farmer.

STICKING TO ONE BREED.

There is sense in the advice of an old stock breeder to stick to one breed. At first I was inclined to disagree with him, for on my own farm I have several breeds of both cows and swine. I have always believed that a little diversity in farming always paid the best in the end. If the market happened to demand one particular kind of breed I stood a better show of suiting it with several breeds than if I only kept one.

But diversity has its danger. This is especially noticeable in breeding animals. My attention was called to this recently by a man who never succeeded well in anything he undertook. He went into swine breeding. The first year he was in love with the Berkshire pig, and he raised some fine animals, and as I thought stood a fair chance to make some money. But a neighbor induced him to try a Chester White, and before another season he was breeding his whole herd with the idea that the Berkshires were secondary to the Chester Whites. Then came a year of popularity for the Poland-Chinas, and then the Jersey Reds. To-day his animals are a mixture of everything. The breed is hard to define.

That sort of breeding doesn't pay. It is better to stick to one breed continuously than attempt to cross them at that rate. Unless one can keep each breed entirely separate it is more satisfactory to stick to one breed, and keep that up to a high standard. By sticking to one breed one soon learns the special needs and requirements of the animals, and it is possible to improve upon them continually. The majority of farmers have no time to study the needs of half a dozen breeds unless for experimental work.

This does not mean inbreeding. One must keep up the standard of the herd by introducing new blood every year. But let that new blood be all of the same kind of breed. That is the very simple secret. Breed in line every day and all the time.

Indiana. WILLIAM CONWAY.

For The Michigan Farmer.

SWINE NOTES.

The average farmer and hog breeder is not as particular in breeding his stock as he might be, or as it stands to his best interests to be. To observe ordinary care in mating it is not necessary that one should have a drove of registered stock, or that they be even moderately well bred. The writer refers particularly to a uniformity of color in hogs that are being prepared to be sold for market, and especially if it is the intention to dispose of them on foot.

There are few things that will appeal to the eye quicker than uniformity; it does not make any very considerable difference whether it is in color, shape, or disposition, all are important. But I am referring now particularly to color. This is a feature in hog breeding that I believe is entirely ignored, at any rate, if any attention is paid to it at all, it is by a very small per cent of the swine growers. To illustrate more fully: A has a white sow; B has a black boar. The former wants to breed his hog with the least possible trouble, so he takes it to his next door neighbor who owns the black boar. Following in the natural course of events the progeny of the mating are liable to be a mixture of both colors, as is very generally the case. If one or the other of the parents prove to be an extra strong breeder, it is possible that the pigs will be of a practically solid color, but this must be purely a matter of conjecture. On the other hand, if A had taken the trouble to drive his hog some distance farther to C who owns a well bred boar of the same color, he would have been reasonably certain that his stock would have been of a solid white, making a much better appearance than any mixed drove could possibly make, all things equal. This will apply to black hogs just as well as white ones; in either the idea in view is uniformity of color.

It may seem that this is a matter of some considerable minor importance; but, nevertheless, it is almost remark-

able how much better appearance a drove of comparatively inferior stock will present that is uniform, as compared with a herd of equally good stock that includes specimens of all colors that are possible to incorporate into the make-up of a hog. If a person interested in cattle comes upon a drove that have a pronounced type of uniformity, even if not of the best quality, he is almost invariably sure to look twice, whereas if they are made up of a variety of types and colors, he may not consider them worthy a second glance. It is not the fact that they are extra good quality that attracts his attention, but simply that they give evidence that care has been used either in their selection or else in their breeding, or both.

The uniform drove of hogs, whether they are in the farm pen or in the stock yards, will always show off to a much better advantage than the multi-colored herd. The appearance will not be lost entirely to the eye of the prospective purchaser, and while there is no fixed certainty that it will increase the price paid, there is every reason to believe that the uniformity may have a tendency to bridge over any little differences in the estimated value of the lot. It is doubtless very true that the extra precautions will not improve the eating quality of the hog; but it seldom proves a disadvantage to follow in line with what is pleasing to the eye.

C. P. REYNOLDS.

MEETINGS OF LIVE STOCK ASSOCIATIONS.

STATE ASSOCIATION OF BREEDERS OF IMPROVED LIVE STOCK.

The annual meeting of the Association of Breeders of Improved Live Stock will be held in the Senate chamber of the State capitol, at Lansing, on Wednesday, December 21st. The program arranged is as follows:

9:00 a. m.—Address by the president; report of the secretary-treasurer; discussion of topics in president's address.

10:30 a. m.—"Wool and Its Preparation for Market," by Prof. H. W. Mumford, Agricultural College. Discussion.

11:00 a. m.—"The Situation," "Horse Breeding," Robert Gibbons; "Cattle Breeding," Wm. Ball; "Sheep Breeding," A. A. Wood; "Swine Breeding," L. F. Conrad. Election of officers.

1:30 p. m.—"Tuberculosis," Dr. C. E. Marshall, Bacteriologist Experiment Station, followed by discussion of the subject. "Some Observations Regarding Swine Plague in Michigan," Dr. G. A. Waterman, Agricultural College.

Reduced rates on all railroads, provided 100 certificates are presented to agent for signature. Secure certificate when purchasing your ticket at home station.

I. H. BUTTERFIELD, Secretary.

SHORTHORN CATTLE.

The eighth annual meeting of the Shorthorn Cattle Breeders' Association will be held in the Senate chamber, at Lansing, on Tuesday, December 20th, with the following program:

2:00 p. m.—Address of the president; report of the secretary and treasurer; discussion of topics in the president's address; "The Future of Shorthorns in Michigan," W. E. Boyden.

7:00 p. m.—"The Shorthorn Cow for Milk and for Beef," Prof. C. D. Smith, Agricultural College; discussion of address; topics for general discussion—"Showing Cattle at the Fairs;" "How to Attract Buyers."

Every Shorthorn breeder in the State should be present this year. Reduced rates can be obtained by securing a certificate from the agent at starting point when purchasing ticket, providing 100 are in attendance at the stock meetings. The return fare to those holding certificates will be one-third rate.

I. H. BUTTERFIELD, Secretary.

RED POLLED CATTLE.

The annual meeting of the Michigan Red Polled Cattle Breeders' Association will be held at the Hudson House, in the city of Lansing, on Tuesday, December 20, 7:30 p. m.

J. M. KNAPP, Secretary.

SWINE BREEDERS.

The annual meeting of the Michigan State Swine Breeders' Association will be held at Lansing, December 20, 1898. The meeting will be called at 1 o'clock p. m., in the agricultural laboratory of the Agricultural College, where the afternoon will be devoted to the usual score-card practice. The evening session will be held in the Senate chamber in the capitol. A very complete program has been prepared. Inquiries

have often been made as to conditions of membership in the Association. Our by-laws provide a membership fee of 50 cents, with annual dues of the same amount. Under this plan a fund was accumulated, and as our expenses are light all dues have been remitted for several years past, but will be required again as soon as we need them. Any-one interested in swine, either as breeder or feeder, is welcome to attend our meetings. Let us make this the best meeting of all. Secure your certificate when you get your railroad ticket, and get reduced rate. Everybody come.

GEORGE H. MCINTYRE, Secretary.

The representatives of the municipal authorities of all the German cities of more than 50,000 inhabitants will shortly meet to discuss means of combating the scarcity of meat, and to petition the government to abolish, or, at least, to mitigate, the prohibition of the importation of cattle, and to abolish, or, at least, reduce the cattle duties. The agricultural interests of Germany are so carefully protected that no foreign live stock or dead meat is permitted into the country, with the result as indicated above that meat is so scarce and dear as to be absolutely beyond the reach of the great mass of the people. The inspectorial system—as a system—is magnificent, but what a farce it is to have scientific and microscopic inspection of a commodity poor people can't buy!—London Meat Trades Journal.

FOR SALE. Percheron Stallion, 1700 lbs. Will take in payment one pair good young horses. J. W. KEENEY, Erie, Mich.

AUCTION SALE OF LARGE ENGLISH BERKSHIRE SWINE, WEDNESDAY, DEC. 14th, 1898, at the Farmers' Ten Cent Sheds in city of Flint. Write for terms of sale to C. E. FAITHORP, Mt. Morris, Mich.

BREEDERS' DIRECTORY.

CATTLE.

J. M. CHASE, Muir, Mich., breeder of registered Red Polled cattle and Poland-China swine. Choice young stock for sale. Prices right.

JOHN LESSITER & SONS, Cole, Mich., breeders of Scotch Shorthorn Cattle and Shropshire Sheep. Stock for sale of both sexes.

J. F. & E. W. ENGLISH, Clarksville, Mich., breeders of Registered Red Polled Cattle. Andrew Boy, sire and dam imported, heads the herd.

50 SHORTHORN BULLS, Cows and Heifers of best breeding. Examination requested. The A. P. Cook Co., Brooklyn, Jackson Co., Mich.

REGISTERED GALLOWAYS.

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A REGISTERED HOLSTEIN BULL 3 years old. Perfectly gentle and first-class in every way. Dam gave over 15,000 lbs. milk in one year. To avoid inbreeding will sell him cheap. B. F. THOMPSON, Detroit, Mich.

J. M. KNAPP, Bellevue, Mich., breeder of Registered RED POLLED CATTLE. Glendale 3317 in service. Milk yield of dam 33 months, 21,071 lbs; milk yield of sire's dam 12 months, 10,589 lbs.

BEEF WITH MILK. Herd contains Columbian prize young bulls and cows. Some valuable SHORTHORNS that will make you money I can please you. CALVIN LOVETT, Otego, Mich.

CRYSTAL SPRING STOCK FARM. Jersey Cattle, bred for intrinsic value, individual merit and future usefulness. Rich cream and butter product, coupled with fine form and good constitution first, second and third prize winners. O. J. BLISS & SON, Silver Creek, Allegan Co., Mich.

NOTICE what the Poland-China breeder, J. W. Bush, of Wacousta, Mich., says of a yearling Aberdeen-Angus bull which I selected for him: "Chesney is a very fine animal. I do not regret the \$15 in the least, because he is the best bull in this country. Thank you very much for him." Speak quickly for the FIVE BULLS FOR SALE FROM SAME SIRE, CHEAP. CLOVE BLOSSOM FARM, Port Austin, Mich.

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A FEW Poland-China Boars of April farrow. Good bone, dark in color, at reasonable prices. Perfect satisfaction. A. O. BOWEN, Wixom, Mich.

BERKSHIRE PIGS from stock that is from World's Fair prize winners. Write for catalog and prices. C. E. FAITHORP & CO., Mt. Morris, Mich.

BERKSHIRE Boars and Sows of the Baron Lee strain. Large boned, lengthy fellows. Choice Shropshire rams. J. W. McDowell, Bad Axe, Mich.

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Duroc-Jersey Swine. Spring and fall pigs for sale; both sexes. H. D. HALL, Martin, Mich.

FOR SALE.—Large Eng. Berkshires: Longfellow & Wantage strains, King of Hood's Farm, Mass. Prices reasonable. V. E. HACKNEY, Mt. Morris, Mich.

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POLAND-CHINAS—Pigs of either sex. Young sows bred; best strains. M. B. TURKEYS, B. P. E. Cockerels. O. B. ROBBINS, Edwardsburg, Mich.

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GETTING RID OF THE SURPLUS.

A report from Lexington, Ky., says an association has been formed there by thoroughbred breeders, having for its object the destruction of worthless thoroughbred mares by destroying their identity and shipping them South. It has created the biggest sensation in breeding and turf circles of any movement of recent years. The Breeders' Mutual Benefit Association, as it is called, has already bought 92 cheap mares at the Lexington sales for \$2,475, and they will be sent away and their identity destroyed. The breeders all over the country have been notified by circular letter of the formation of this association, and invited to join it and contribute to the fund for buying the cheap mares. So far there have been many responses, all of them favorable. The American Horse Exchange, New York, has wired congratulations to the breeders and also sent by wire \$100 to be added to the fund.

While the organization of such an association has been generally commended, there are a number of parties connected with the turf who do not believe that the remedy proposed is a proper one. It is an admitted fact that the breeding of thoroughbreds has been overdone during the past ten years. Twelve years ago there were not over 500 thoroughbred mares in Kentucky. To-day one establishment near Lexington has nearly 700, and in the entire state there must be in the neighborhood of 1,500 mares engaged in producing horses for racing purposes. Twelve years ago there were registered in Bruce's Stud Book not more than 1,500 mares, while possibly 500 were being bred to thoroughbred horses that were not registered. A well-posted turfman thinks that there must now be in the neighborhood of 7,000 to 8,000 thoroughbred mares in the stud in this country, so that instead of about 1,200 thoroughbred yearlings placed on sale each year, as was the case ten or twelve years ago, there are now not less than 5,000 youngsters offered each season.

While the race tracks have multiplied, and while racing is conducted the year 'round, there is not a sufficient demand for this large number of colts and fillies to make their production profitable. Many of the largest breeders are doing business on borrowed capital, and since the prices of thoroughbred yearlings have gone down they are having trouble in making ends meet. With yearlings and weanlings selling for \$10, \$25 and \$50, as many of them did at the Eastern sale last week, there is actual loss to the breeder. It costs \$20 a year to keep a brood mare in Kentucky; it costs \$60 to keep a colt six months the way they are kept, and it costs \$10 to sell it. This makes the actual cost of a yearling colt \$100 without allowing anything for the service fee of the stallion or the uses of the mare, for on an average only seven colts can be reared from ten mares in a year. When the average service fee—\$50—is added, and \$50 for the use of the mare, it will be found that a thoroughbred colt costs the breeder the neat sum of \$200 by the time he gets it to the sale ring. Nearly all the large breeders buy all the grain and hay they feed their colts and brood mares, as their farms furnish nothing but grass. Thus these breeders are out large sums in cash each year for feed stuff for their horses.

Whether the Mutual Benefit Association will be able to remedy the market is believed by many to be doubtful. There is such a great overproduction of thoroughbred yearlings that the purchases of the association will be but as a drop in the bucket, and the number of mares will continue to increase until thoroughbreds will be as plentiful as cart horses and really cheaper.

The figures given above as to cost of a yearling to its breeder afford also some basis upon which to reckon the cost of producing light harness horses. It appears certain that no breeder can afford to sell a yearling trotter from a popular and high priced sire under \$150. The question is, how many of them return a profit to the breeder? Of course now and then a sensational colt is secured that sells at a high price, and this helps balance the account with the cheap ones. If such

colts were not bred now and then the breeder would be in a bad way, and must finally fail if he relies entirely upon his breeding operations to meet running expenses. The business of breeding horses for speed is as precarious as investing in lottery tickets. It is different where a farmer has one or two good mares, and conducts his breeding operations merely as an adjunct to his business.

FRENCH METHODS OF FEEDING HORSES.

From our Paris Correspondent.

Farmers are recommended to adopt a mixed ration of barley and oats for their horses, instead of an exclusive oat feed. Climate has to be taken into account. In the south of France and Algeria, barley is preferred for horses. In England, the secret for the rearing of horses is stated to reside in the oat bin. Beyond doubt it is the grain that best suits horses, as it contains in large proportions the principles which hasten growth, impart vigor, produce strong muscles and hard bones. Black and grey oats are the varieties in favor in France; they weigh 40 lbs. to the bushel; the white variety is not ranked as so nutritive. Barley is a good grain, and succeeds very often in the all round feeding of horses. Belgium employs the mixture of oats and barley for working horses. No marked difference is observed in their appearance and health, and the gain in point of economy, though in favor of the mixture, is not much. French farmers prefer substituting for the part oat aliment, maize and beans. Veterinary Surgeon Collin protests against giving horses rye, unless in the form of crushed, or as a meal. Its grain is too hard for the horse to digest with profit. When the rye is crushed, mixed with cut-straw, placed in a bucket, and covered with boiling water, the steep, after eight hours, will be relished by the horses. Rye can never be employed as a substitute in the feeding of working horses; it can be in the case of animals only to be fattened.

HORSE GOSSIP.

At the midwinter sales of thoroughbreds, held at Lexington, Ky., lasting ten days, 643 head were sold for a total of \$124,805, an average of a trifle over \$194 per head.

Lissak, a famous race horse, was purchased at the Lexington sales for W. C. Whitney, of New York, at a cost of \$7,600. Lissak is six years old, sire by imp. Loyalist, dam imp. Capability.

Flat racing in England closed for the season on November 26th. Madden has ridden more winners than any other English jockey; Tom Loates is second in number of wins, and Mornington Cannon third. None of them, however, came near equalling Tod Sloan's average.

We referred last week to the action of the Royal Agricultural Society of Great Britain adopting a resolution excluding foals, yearlings and two-year-olds that are docked from the society's shows. The resolution as adopted is as follows: "That at and after the Maidstone meeting of 1899 no foals with docked tails be allowed to be exhibited at the society's country meetings; that at and after the meeting of 1900 the same rule shall apply to yearlings as well as foals, and that at and after the meeting of 1901 to 2-year-olds also."

Our Paris correspondent says the annual show of mules and asses for the region of Poitiers, was recently held at Fonte noy-le-Comte. It was very successful. All the entries were of animals that figure in the stud book—like for mules and asses. Since the cessation of the Spanish war in the West Indies, a great decline has set in for mules; the French commissariat, however, purchases the animals extensively. It is remarked that the mules are becoming much larger and the breeding trends in that direction. There is an extensive demand for the asses, to meet the necessities of holiday resorts. A great many parents prefer the Poiton ass for nursery carriages to a pony.

The fact that it is almost impossible to sell a trotter or pacer that has to wear hobbles, for a road horse in any of the large cities, will induce owners and drivers to discard them in the future to a very large extent. A hobbled horse, says the Horse Gazette, is dangerous on the track and an eyesore on the road. I know of half a dozen Buffaloniens who are on the outlook for fast horses for the winter carnival on

the snow. Approach them with a good horse, and the first question asked is "does he wear hobbles?" If the answer is yes, they invariably shake their heads and walk away. It is the same in New York where they have the greatest speedway on earth. Throw the hobbles away, trainers and drivers, or ruin your prospective campaigner for marketable purposes.

In commenting on the recent sales of Star Pointer, 1.59%, and Cresceus (3), 2.11%, John Splan had this to say: "It simply goes to show that the champions in their class, the well-bred trotter and pacer, are being sold very cheap. Certainly Pointer was well worth \$25,000 of any man's money; for aside from the fact of his being the fastest and best advertised horse in the world, his value in the stud was apparently overlooked. It was on my advice that Mr. Ketcham bought Robert McGregor, 2.17%, in 1890 for \$8,000. There were some individuals who said he was foolish to buy. The gentleman came to me about it, and I said to him that the stallion would win out his purchase money in the stud, and that his get would put money in the bank for him. Now I will venture to bet a new hat that Cresceus won many thousands last year for his owner, and it is a fact that Ketcham certainly lost nothing in disposing of the horse to the Kalamazoo stock farm for \$14,000, even though the price was small."

One of the strongest incentives to improvement of horse breeding in this country, says the Drovers' Journal, has been the discrimination of foreign buyers against unsound, blemished and ill-shaped American horses offered in the open markets. Exporters do not purchase unsound animals and are critical judges of all the points of conformation, and the education which they have imparted to domestic dealers will accelerate the weeding out process in the domestic horse industry. A rough hock is no longer an excuse for a spavin. Rounding on the hock joint means that the animal has a curb. Side bones and splints are not overlooked in the inspection. A careful and thorough examination is given every horse purchased for exportation to discover unsoundness and defects of conformation. The effect of such rigid inspection will consummate a general condemnation of unsound animals for breeding purposes. Blind mares and blind stallions ought to be excluded from every breeding establishment, as one of the most frequent of unsoundness among draft horses is defective eyesight.

The principal reason for the urgent demand in Europe for the American trotter with an extreme flight of speed is the liberal purses offered at the foreign harness race meetings. The earning capacity of a fast trotter in Europe is almost fabulous and the novelty of harness races is very attractive to the public. No European breeds have yet been able to contend on even terms with the American trotter, not even the much-vaunted Orloff and French coacher. The superiority of the American performer to all other breeds is attested by the amount of winnings placed to his credit. The largest winner on the continent the past season was Princess Nefta, sired by the standard bred stallion Prince Warwick, she leading the list with \$13,510. Col. Kuser, 2:11%, an imported American trotter, ranks second in the list of winners with \$11,075 to his credit. Athanio, by Junio, 2:22, comes next with \$10,150.—Drovers' Journal.

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THE PROSPECT FOR FINE WOOLS.

It is quite probable that we are on the eve of an improved market for Merino wools. It will be noted that reports from the London wool sales refer especially to the strength of these wools, choice Australian Merino wools, both in the grease and scoured, showing an advance over prices paid at the October sales. It is quite evident these wools are not in large enough supply to meet the demand of manufacturers. No wools of any class are being purchased for the United States, so the improvement in tone and values does not come from American competition. It is simply the result of changing the flocks in the principal wool-growing sections of the world from fine to middle and coarse wools, through a system of grading or cross-breeding. This system has been followed in Australia and South America to such an extent as to completely change the character of the clips from a large percentage of the flocks in those countries.

As to what caused this change from growing fine wools to the production of other grades, it is simply the result of low prices for wools and a steady demand at advanced prices for mutton. This was also helped by the fashions in men's clothing, calling for a different class of wools from that furnished by Merino flocks. The sheep-raiser in Australia and the Argentine Republic, with immense Merino flocks on hand, saw the price of such wools drop below the limit of profitable production, and he had to make a change of some kind or go out of business. The successful shipment of frozen carcasses of sheep from these countries to Great Britain, and the fair prices realized upon such shipments, started flock-masters to change the character of their flocks. They wanted a larger carcass, and one that could be grown more quickly than the Merino which had only been used to produce good fleeces, while their mutton qualities were largely neglected. The English mutton breeds, with their record for early maturity, and the fine quality of their meat, were naturally turned to as offering the surest and quickest means of changing their flocks from wool to mutton production. Heretofore it had been wool with the carcass as a secondary consideration; now it was the carcass that was wanted with the fleece as an incident to its production. The result is seen in the large shipments of frozen mutton from Australia and the Argentine, and the change in the character of the fleeces from fine to cross-bred and coarse wools as the grading with mutton rams continued. The breeds generally relied upon were the Lincoln, Cotswold and Leicester in the long wools, and the various families of the Down breeds in the middle wool classes. Argentina purchased enormous numbers of Lincolns, as well as Cotswolds and Shropshires, and Australian flock-owners took up with the Southdown, Shropshire, Hampshire and Oxforddown breeds. The change made a great improvement in the mutton qualities of their flocks, and the wool produced was also in good demand. But the proportion of fine wool produced was decreasing each year, and the clips were becoming very mixed in character. This system of cross-breeding has been followed until the world is suddenly confronted with a deficiency of Merino wool. That is the situation to-day, and it is one that is becoming more pronounced each month.

The same conditions that produced the changes referred to abroad have also been at work in the United States. The wool clip of the country has entirely changed in character. All breeds of mutton sheep have been crossed with the Merino flocks on the farm and on the range. Good straight Merino fleeces are scarce in the wool-producing sections. There are yet considerable stocks of such wools held at the east, as the result of heavy importations to escape the duty levied by the Dingley bill. Next season they will be scarcer than ever, especially as the fashion in goods is changing to those of a finer grade with a smooth finish. When the stocks at the east are exhausted, as they will be before spring, from where is the deficiency to be supplied? That is an important question for flock-owners to consider, and especially those who yet have flocks of good Merinos.

It looks to us as if they were about to have their innings, and that values are extremely likely to show a strong advance.

PROFIT IN SHEEP.

The Governor of the Territory of New Mexico, in his annual report to the Secretary of the Interior, takes occasion to refer to the sheep industry in that section, and its importance to the residents of a territory whose natural productions are not of a diversified character. He says: "A few years ago sheep could be bought for 75 cents per head and even at that price there were few buyers. To-day ewes are selling freely from \$3.00 to \$4.00 per head; yearlings (wethers), \$2.50 to \$2.75; two years and up (wethers), \$3.00 to \$3.25, and six-months-old lambs at from \$2.00 to \$2.25 per head. One of the prominent sheepmen of New Mexico, who started in the business 20 years ago with practically no capital, has just disposed of his business and finds himself worth over \$100,000, notwithstanding the fact that he, in common with the other sheepmen, lost money for several years during the agitation for and life of the Wilson bill."

Continuing the Governor says: "The advance in the price of wool has kept step with that of the sheep. In 1896, when sheep were worth only 75 cents per head, the price of wool touched its lowest point. Eastern commission houses even refused to make any advance on grease wool and owners were offered 3 to 5 cents per pound for the fine clips. To-day these wools are worth 11½ cents to 14 cents per pound and the importing price of wool has not yet been reached by 2 to 3 cents per pound. Light shrinking wools sold as high as 17½ cents last fall."

The above statements clearly show the effects of legislation upon the sheep industry, and the results that follow the legislative policy of Congress in dealing with this very important interest. The effect of the present policy has certainly been most beneficent upon the industry, and has been equally beneficial to all sections of the Union.

HOW WOULD IT DO WITH DOGS?

The Tacoma Ledger tells how the sheep raisers in Washington are going to work to circumvent that cutest of all wild animals, the coyote, which does much damage to their flocks. One sheep raiser had lost about 100 head the past season, and one night during lambing time the coyotes carried off ten good lambs. He got mad, went to Yakima and purchased twenty-six cayuses (Indian ponies), some of which were in the city pound, and secured the others from Indians. He shot these horses at different points on his range, and poisoned the carcasses, using about a half ounce of strychnine and about an ounce of arsenic to each horse. This was done about a week ago, and reports from the neighborhood show that dozens of coyotes have already found the bait. A number of sheep men are adopting this plan. It serves a double purpose. First, it gets rid of the coyote in the cheapest way. Second, it gets rid of a few cayuses, which are almost as big a nuisance as the coyotes. The coyotes will kill sheep directly, while the cayuse makes war on the sheep by eating the grass so closely the sheep cannot exist in the winter, and hence have to be fed.

It strikes us that some such plan would work well in the case of dogs. Dead carcasses of any kind could be prepared and left in pastures where flocks have been attacked. The dogs are sure to return, and would soon be feasting on the carcasses if there were no sheep in the field. The scheme is not a new one, but it could be made very effective.

WOOL STATISTICS.

The most important change in the position of wool the past year has been the great decrease in imports, both of wool and its manufacture, less than \$32,000,000 in place of more than \$102,000,000. It is an astonishing fact, which illustrates the decadence of our sheep industry from 1894 to 1897—its almost utter collapse—that the whole value of our domestic wool, mutton and lamb was not sufficient in 1896-7 to pay for our imports by some \$40,000,000. This year in comparison we save about \$70,000,000 in imports, and by increase in quantity and value get some \$40,000,000 more for our wool and mutton—that is, our wool and meat are

worth about \$100,000,000 against \$60,000,000 the previous year.

The details of this change are interesting, as given in the treasury records just published. The value of wools imported is \$16,783,692 against \$53,243,191 the previous year, and of manufactures, \$14,823,768 against \$49,162,992. In these figures are included values of rags, wastes, shoddy and fleeces amounting to \$697,622, or 3,299,771 pounds—a great falling off from the record of the previous year, 49,913,732 pounds, equal to almost 150,000,000 pounds of wool, coming in to displace domestic wool and depreciate the quality of our clothing supply and costing before shipment \$6,935,658. Placing these with the wool imports, we have the following comparison for fiscal years:

	1897—	Value.	1898—	Value.
Class 1.	200,759,079	\$34,281,656	45,430,087	\$7,969,611
Class 2.	37,951,490	7,187,620	4,320,873	859,599
Class 3.	112,141,457	11,773,915	80,031,342	7,954,482

Total... 350,852,026 \$53,243,191 132,785,302 \$16,893,692

Shoddy... 49,913,732 6,935,658 3,299,771 697,622

The imports of the previous year were some 50 per cent more than all our domestic supply, and of last year only about half as much as the past year's production. This is certainly a great improvement, a great help to growers and a vast benefit to consumers in escaping the infliction of shoddy and the brash wools of hot climates and neglected sheep husbandry.

More than half of this avalanche of imports comes from England, though little of it is grown there; over 28,000,000 pounds from China and other parts of Asia, and some from France, Germany and other countries of Europe.

FLOCKS AND FLEECES.

The twentieth annual meeting of the New York State American Merino Sheep Breeders' Association will be held in Rochester, at the Whitcomb House, Tuesday and Wednesday, December 13 and 14, 1898. Meeting of the executive committee Tuesday evening at 8 o'clock, Wednesday morning meeting called to order at 11:30. President's address, secretary's and treasurer's reports, Wednesday afternoon, at 1 o'clock, election of officers for 1899 and miscellaneous business. The secretary of the association is J. Horatio Earl, Skaneateles.

While the sheep scab is included among the list of diseases to which sheep are liable, it is only so done for convenience. No veterinarian thinks of this scab insect as a disease in the way those disorders of the animal functions are which are due to infection or disturbance of the general health. It is no more a disease in this sense than those disorders due to parasites which affect plants, as for instance the apple scab, or those minute pests, the plant lice, which are treated by chemical liquids in precisely a similar way to that in which the sheep scab is.

The Union Stock Yards Company, at Fort Worth, Texas, has bought a valuable goat. With a large shipment of sheep fed here was this goat Sancho. When a carload of sheep was cut out to be reloaded Sancho would lead the sheep into the car, taking his stand near the door, and would jump out as soon as the last sheep was in. The stockyard men were so pleased at the time saved in loading by the use of Sancho that they clubbed in and bought him from his owner, a Laredo sheep man, at a very high price. The time saved in loading a trainload of sheep was several hours.

In a review of the Australian wool trade during the past season the Adelaide Observer remarks that though production was on a reduced scale owing to heavy losses amongst the flocks through drouth, what was lacking in quantity, was almost made up by quality, and a rising market resulted in a return to growers which compared favorably with the financial results of previous seasons. Fourteen years ago shipments from South Australia aggregated 152,350 bales, and four years later had fallen to 134,427 bales. From that date up to 1895-6, with one exception, there was a regular animal increase until 179,576 bales were sent away. Last season the export was only 115,603 bales, the smallest shipment for twenty years.

The ninth annual meeting of the Hampshire Down Breeders' Association was held at Chicago, November 23d. After listening to the report of the secretary, which showed the association to be in good financial condition, resolutions on the death of James H. Taft, late of Mendon, this State were adopted. The officers elected for

the ensuing year are as follows: President, I. J. Hiller, Michigan; vice-presidents, J. W. Ganes, Wisconsin; J. G. Massey, Wyoming; E. M. Benham, New York, and P. W. Artz, Ohio; secretary-treasurer, John I. Gordon, Mercer, Pa. The death of Mr. Taft was a severe blow to the interests of this breed in Michigan, as he was an enthusiastic admirer of the Hampshires, and always pushing their claims for recognition.

The county figures just issued showing the number of sheep kept in Great Britain this year point to a slight but welcome increase of prosperity for our flockmasters. In England there has been an average increase of 10 head for every 1,000 sheep, in Scotland an increase of 22, and in Wales of 23. The average number of sheep to every 1,000 cultivated acres in Great Britain is 464, the total stock being nearly 27,000,000. The best stocked county is Kent, with 957 head to each 1,000 acres; the worst—leaving out the county of London—is Cheshire, with 145. London is included in the returns as a sheep county, although it is far and away at the bottom of the list with an aggregate stock of only 5,437 out of the 27,000,000 kept in Great Britain.—London Meat Trade's Journal.

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SHROPSHIRE HALL STOCK FARM has on hand a few choice imported yearling and two-year-old rams. Imported ram lambs and yearling and two-year-old American bred ewes and rams. Personal inspection invited. **L. S. Dunham,** Concord, Mich.

Farmers' Clubs.

CONDUCTED BY A. C. BIRD.

All correspondence for this department should be addressed to A. C. Bird, Highland, Mich.

OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

President—E. J. Cook, Owosso.
Vice-President—Mrs. E. L. Lockwood, Petersburg.
Secretary-Treasurer—C. M. Pierce, Elva.
Directors—W. H. Howlett, Danville; C. J. Phelps, Damon; F. M. Whean, Vernon; A. L. Landon, Springport; E. Garnt, Highland; A. P. Green, Eaton Rapids.

All communications relating to the organization of new clubs should be addressed to C. M. Pierce, Elva, Mich.

CONVENTION NOTES.

All delegates should bring credentials.

Governor Pingree will address the joint meeting.

Read the Association Constitution in another column.

Many old-time faces will be seen among the delegates.

Every session will be called promptly on the appointed hour.

Discussions should be strictly confined to the subject in hand.

Too many demands for legislative action will result in nothing accomplished.

There promises to be no break in the regular program as published in The Farmer.

The convention will be the largest thus far in the history of the State Association.

On arriving you will find Association Secretary Pierce at the reception room, Hudson House.

Reduced rates on all railroads and at all hotels. Association headquarters at Hudson House.

Several amendments to the constitution will be proposed. If possible give it a careful reading before coming to the convention.

Many of last year's delegates will be present as visitors. This all indicates a thoroughly united and healthy organization.

Shall it be made possible to elect an Association officer to a second term? This question will come before the convention.

Every delegate and every visitor should arrange to remain to visit the several State institutions on Thursday. Plans have been carefully made.

Insist on receiving certificates from your local railroad ticket agent. He has them. In no other way can reduced railroad fares be secured.

Visiting members from many local clubs will be present besides the regular delegates. Every courtesy except the privilege of voting will be extended to them.

The questions on State Institutions to be answered by the respective heads of these institutions will be a most interesting and valuable feature of the meeting.

The loyal and unselfish work of President Cook and Secretary Pierce throughout the entire year, and especially during the preparation for the annual meeting, will be felt in each and every session of the convention.

Judging from the yet incomplete lists of delegates received at this office a large percentage of the number will be ladies. The praiseworthy practice of sending one lady and one gentleman delegate from each club is growing in popularity.

The Kimmis County Salaries bill and the Atkinson Equal Taxation bill will both be given the most careful consideration at the business sessions. If possible every delegate should give the text of both measures careful study before coming to the convention.

The following from President Cook should be made known to every club member in Michigan: "Can I be allowed, through the Club department of The Michigan Farmer, to invite the members of local clubs who desire to do so and whose clubs have not joined the Association, nor elected delegates, to meet with us in our annual meeting? They will not be members, but visiting brothers. They will get the same reduced railroad fare and hotel rates as the regular delegates, and receive a hearty welcome at all our sessions;

and I believe they will obtain much of value to carry home to their local clubs. Come and enjoy this gathering with us."

STATE ASSOCIATION CONSTITUTION AND BY-LAWS.

PREAMBLE.

We, the delegates from the various Farmers' Clubs of Michigan in convention assembled, realizing the importance and efficacy of organization in the promotion of ideas and the advancement of measures of general interest and benefit to the agriculturalists of this State, believing that the social, moral, intellectual and financial condition of the farmers is advanced by local organization of farmers' clubs; and that the organization of other local clubs will be promoted by a central or State association of clubs already in existence, and believing that such an organization would be a valuable means for the interchange of ideas and the securing of ends which may be deemed of general benefit to the farmers of this State, do hereby adopt the following constitution and by-laws for the government of such an association.

CONSTITUTION.

Article I.—Name.—The organization shall be known as the Michigan State Association of Farmers' Clubs.

Art. II.—Objects.—The objects of this Association shall be as set forth in the preamble.

Art. III.—Officers.—The officers of this Association shall be a president, vice-president, secretary and six directors, whose duties shall be such as usually devolve upon such officers, except that if occasion requires, the secretary shall also perform the duties of treasurer. In case of a vacancy occurring in the office of vice-president, secretary, or board of directors, it shall be filled by appointment by the president.

Art. IV.—The annual meeting of this Association shall be held in Lansing, commencing the second Tuesday of December in each year.

Art. V.—The officers of this Association shall be elected at the annual meeting by ballot, a majority of all votes cast being necessary for an election. The president, vice-president, and secretary shall be elected for one year, and one director for one year, two directors for two years, and three directors for three years, and hereafter two directors for three years shall be elected annually. No officer shall be eligible for re-election except the secretary, who may be re-elected by a three-fourths vote of all the delegates present.

Art. VI.—Any Farmers' Club, either in or without the State of Michigan, may become a member of this Association by certifying to the secretary its desire and paying a membership fee of one dollar, which fee shall entitle said club to membership, for one club year, which shall be from the close of one annual meeting until the close of the next annual meeting.

BY-LAWS.

1. The officers of this Association shall constitute an executive committee, the duty of which shall be to prepare a program for the annual meeting and to perform such other duties as may properly devolve upon an executive committee.

2. Each club shall be entitled to send two delegates to the meetings of the Association, who, before being seated, shall present proper credentials.

3. The officers of this Association shall assume the duties of their respective offices immediately upon the close of each annual meeting.

4. The faculty of the Agricultural College shall be admitted to all the privileges of the floor but shall not be entitled to vote.

5. It shall be the duty of the secretary of the Association, upon application from any Farmers' Club for speakers or instructors on any of the subjects pertaining to the interests of such club, to designate the club, which, in his judgment, may best perform such service. The club, so designated, shall elect from their number a suitable person or persons to perform such service. The actual expense of such speaker or instructor shall be paid by the club making the application.

6. Amendments.—The constitution or by-laws may be amended at any annual meeting of the Association. Such amendments shall require a two-thirds vote.

7. A membership fee of one dollar from each club belonging to the Association shall be paid on or before the date of the annual meeting of the Association each year. If any club fail to renew its membership as specified above, it shall be the duty of the secretary to ascertain if such club desires to continue in the Association; if it does not, its name shall be dropped from the roll.

THE COUNTY SALARIES BILL.

HON. A. N. KIMMIS.

I have read carefully the reports from local clubs as published in this department, to discover what criticism would be made of the County Salaries bill in the form in which it passed the House of Representatives. I have reached the conclusion that the discussions have been confined to the principle involved, while the form of the bill may not have received the most careful consideration. It is a matter of great satisfaction to me that the principle involved has received unqualified endorsement from the Farmers' Clubs of the State. My name having been so closely identified with the bill, I may be pardoned for calling attention to the fact that the "Kimmis County Salaries Bill" as printed in The Farmer not long ago, is not the bill I introduced in the Legislature of 1897. It was the bill as amended and passed by the House.

Nearly all legislation is the result of compromise. Few people realize against what forces the friends of the Salaries bill contended for its passage in the House. When we remember the combination of forces that antagonized the bill, it is a matter for congratulation that so few concessions were necessary. Those concessions which were necessarily made to the opponents of the measure, were in no instance a surrender of the principle for which we contended. They were, however, of such a nature as to narrow the effect of the bill by limiting the scope of its application.

The annual meeting of the State Association is near at hand. It is probable that some action will be taken at that meeting relative to the Salaries bill. If we succeed in securing the enactment of a law that will produce the results aimed at in the Salaries bill, we must present to the Legislature a bill that can be endorsed, both in principle and in form, by every Farmers' Club in the State.

I have no hesitation in affirming that the County Salaries bill, in the form in which it passed the House, is not such a bill. It seemed best to accept the amendments which were made, because without them the bill could not have passed the House. At the coming session we shall meet a different body of men. Is it not wise to get back to our first position? Let the will of the State Association be made known at the annual meeting. Let us fight from first to last for the application of business principles in the conduct of public affairs.

For The Michigan Farmer.

HOW TO INTEREST THE YOUNG PEOPLE IN CLUB WORK.

MRS. C. J. REED.

I have noticed in a large number of clubs a lack of young people, such clubs being composed almost entirely of the middle-aged and elderly. This is not as it should be. If our clubs are to become an important factor in the future of our state and national affairs it is necessary that the young people should be enlisted in their interest and become a part of them. The young people of to-day will be the middle-aged of to-morrow, and as the fathers and mothers drop out along the journey of life, who but the sons and daughters can be expected to ably and capably fill their places?

"As we old and wiser grow, Much we'll learn, and much we'll know."

But how is this to be brought about? I have read reports of the discussion of the question, "How can we keep the young people on the farm?" and not infrequently have I heard it discussed. All this is important. There is no wider field for young, active minds, nor a better supply of good, common sense than can be found upon the farm. Here is the birthplace of our coming representatives and senators, yes, and governors and presidents.

We would then give as the first essential: Interest them in the farm. Then let the program committee occa-

sionally arrange questions that will be of interest to the boys and girls, and appoint them to take part in the discussion. This will give them an opportunity of expressing their own ideas and thus expanding their range of thoughts. Let them be appointed to act upon the different committees so that each in turn will have some special work to do.

If there is musical ability in the club encourage it by requesting those possessing it to form musical clubs, as glee clubs or mandolin clubs, etc., for the benefit of the farmers' club. A club is dry indeed that has not plenty of music.

Make use of the question box as often as practicable, and see to it that there are questions which will sharpen the wits of both old and young, and brush the cobwebs from their brains. Have questions of political and national importance, questions of literature, history and art, as well as those which pertain to farming and the farm.

Now and then some of the young people should have a paper on "Current Events." This would teach them to read carefully and garner that which is instructive and interesting. Another excellent feature is having quotations at roll call, each member responding to his name with a quotation, giving the author of the same if possible. An original program committee will have little trouble in devising other means of interesting the young people in club work.

We would not for a moment detract from the great work the older members are doing. All honor to them. They have borne the burden in the heat of the day. But we are discussing another of the requisites for permanently successful club work. May success ever attend our clubs as a whole, and may we never lose sight of that for which we are organized—the best interests of the agricultural class, socially, politically and intellectually.

REPORTS FROM LOCAL CLUBS.

MANCERLONA AND CUSTER FARMERS' CLUB.

Mr. and Mrs. A. C. Elder entertained the October club. Owing to the inclemency of the weather, but few were present. The attendance at the November meeting, with Mr. and Mrs. Wilkes, was large. New officers were elected. Mr. and Mrs. Swan will represent the club at the State Association.

Antrim Co. E. D. ELDER, Cor. Sec.

CENTRAL FARMERS' CLUB.

Our November meeting was well attended. Topic, "Dairying." Some held to the opinion that there is no profit in keeping more cows than are needed to supply the family with butter and milk, unless one has private customers and can receive better than the general market price. Others thought that since calves bring so high a price, cows are as profitable as other stock. A communication from the Secretary of State on farm statistics was read. A resolution was adopted favoring the collection of farm statistics. D. G. Locke was elected delegate to the State Association.

Ionia Co. COR. SEC.

NORTH VERNON FARMERS' CLUB.

November club was held with Mr. and Mrs. L. J. Smedley. In opening the Association question, J. J. Patchel said railroads should not be favored any longer. Did not favor local taxation. Said that if we did not this time elect right men to the Legislature all will be lost, and perhaps forever. A. L. Chambers favors local taxation. After discussion, delegates were appointed to act with the South Vernon Club to secure free mail delivery. Mr. and Mrs. T. Cooling were elected delegates to the State Association.

Stella Davenport, Cor. Sec.

WALLES FARMERS' CLUB.

Club met with Mr. George Gregg. The Association question was opened by reading from The Michigan Farmer an editorial on the subject, and those who do not take The Farmer were surprised at the great work of the State Association. Henry Maurer was appointed delegate to the annual meeting. Both representative nominees favored the Kimmis bill, but Mr. Kingott would include the sheriff in the list of salaried officers.

Mrs. Albert Hand, Cor. Sec.

ARGENTINE FARMERS' CLUB.

Club met with Mr. and Mrs. E. Trapagan. Principal topic, "Ought our interests to be looked after at the next session of the Legislature in regard to the taxation of railroads and other corporations, and, if so, what would be

the best method?" J. C. Laing, in opening, thought that so long as railroads send men there to look after their interests, we should do the same. After discussion the following was adopted: Resolved, That we are in favor of railroads and other corporations being assessed at their actual value, or equal with other property; and furthermore, that the State Convention elect a delegation to look after the passage of such a bill at the next session of the Legislature. In the discussion of the Association question, all seemed very much in favor of the passage of the Atkinson bill.

Genesee Co. EDWIN PRATT, Cor. Sec.
UNION OF MUSSEY FARMERS' CLUB.

A good membership was present at the home of Martin Went, November 3. The Association topic was so ably presented by A. Tosch in a paper, that he and Ida Tosch were elected to represent the club at the State Association. After a speech by the president in favor of the County Salaries bill, a resolution was adopted endorsing both the Atkinson and Kimmis bills. A highly interesting question box was enjoyed by all.

RHODA M. MATTESON, Cor. Sec.
St. Clair Co.

RICHMOND AND RILEY FARMERS' CLUB.

Mr. and Mrs. L. Hawes entertained the November club. Topic, "What is the present trend of thought in regard to farm life?" Mr. Dunn said, in business a 7 per cent profit is considered good. Some farmers do better than that, but not all. The Agricultural College is a grand place to educate farmers' children. Mr. Gilbert: Farm life is no longer considered one of drudgery. Farm boys are wanted in the professions because their minds are more comprehensive. Rev. Jennings: Farmers are generally better informed. There is a better feeling among them than formerly. Club favors the Kimmis salaries bill.

St. Clair Co. A. H. STEPHENS, Cor. Sec.
WASHINGTON FARMERS' CLUB.

Mr. and Mrs. E. Lamb entertained the last club. The club favors the Kimmis county salaries bill. Different expressions of members are: Reduce the income from county offices to that of private business, or to that of farmers. This will reduce the temptation to blow in a lot of money on election.

The members are divided on supporting farmers' institutes by tax. Some claim that it is contrary to our principles; others that it is for the education of the farmers of the State, who are as much entitled to the same as lawyers, doctors, etc.

All approve the equal taxation measure. Tax according to value, and not upon receipts; or else tax farmers and all others the same, on their profits. The sentiment is general that it would be vastly better for farmers to have freight rates lowered than passenger rates.

All opposed free text-books, but upon the question of uniform text-books opinions differed.

Delegates to the State Association, Wm. H. Norton and Wm. Bishop.

SPRINGPORT FARMERS' CLUB.

Club was held at the home of Mrs. C. A. Whitman. Quotations of thanksgiving sentiment were given. Mr. Joy read an article on "Abstract Books of Jackson Co.," and explained the abstract business. In the discussion, A. L. Landon favored county ownership. Others agreed, and a resolution was adopted instructing the board of supervisors to confer with the register of deeds for the purpose of getting out a new set of abstract books, to be owned by the county; and said register of deeds to be paid a just compensation for the making of the abstracts. In the discussion of the State Association it was thought to be of great advantage, giving a chance to bring our wants more directly before the legislature. Mr. and Mrs. B. A. Joy were elected delegates to the Association. A very interesting program has been arranged for the next meeting, on Dec. 17, at the home of Mr. and Mrs. A. L. Landon.

ADA WELLINGTON, Cor. Sec.

WHITE LAKE FARMERS' CLUB.

At the meeting with Mr. and Mrs. Welch resolutions were adopted in respect to our deceased brother, B. H. Clark. Delegates to the State Association, Mr. and Mrs. R. D. Hubbard; to the County Association, R. D. Hubbard and W. E. Clark. A committee appointed to interview candidates for the legislature reported every candidate solid to the core in regard to serving the farmers. In the discussion of the local question, W. E. Clark thought agriculture had been well recognized in the creation of the Department of Agriculture. We need more confi-

dence in one another. We are too apt to compare the average farmer with the marked success in other callings. Should embrace every opportunity to improve ourselves intellectually, practice speaking in public for discipline, and especially encourage our young people to do so. E. P. Flower: Better remuneration would increase the dignity of the farmer's calling. Proper legislation would assist. Too many millionaires in the U. S. senate to expect reforms in legislation. Better elect them by popular vote. Give us a high protective tariff. Prohibit dealing in agricultural options. Reduce the legal rate of interest to four per cent. Give us free coinage of silver. Others thought the great drawback to the advancement and recognition of the farmers is the lack of education, along public lines especially. Intelligence is the standard by which our standing is and must be judged. If we would improve all the opportunities and privileges which are ours to enjoy we would rise to some extent in the estimation of the world.

Oakland Co. COR. SEC.

WOODSTOCK FARMERS' CLUB.

Last meeting with Mr. and Mrs. E. Hollands. Thos. Beal was elected Association delegate, the club to pay the expenses. In the discussion of the Association question several extracts from The Farmer articles were read. A general discussion prevailed. Both the Kimmis and Atkinson bills were heartily endorsed. A Christmas program will be given and a Christmas dinner served at the December 17 meeting, with Mr. and Mrs. Melvin Crane.

MRS. J. H. TRUMBELL, Reporter.
Lenawee Co.

LIBERTY FARMERS' CLUB.

Alonzo and Miss Annis Vicary entertained the November club. Mr. Edwards brought up the county abstract question and it was referred to a committee to be acted upon at the next meeting. Mr. Edwards reported that both candidates for representative had pledged themselves for the Kimmis and Atkinson bills, that Mr. Sharp had virtually pledged himself to the Kimmis bill but would not express himself regarding the Atkinson bill. The other candidate for senator had not even replied. The Association question was thoroughly discussed, all agreeing that railroad property should be taxed as other property, and that the free pass evil should be abolished by a firm hand.

Mrs. H. D. Wetherby, in her paper on "Style and Style," was, as usual, both witty and sensible. Among other things she said: I know you men generally sniff at style; but wait, I've got you, for at our last club in discussing county officers' salaries one of our sensible men said the salaries should recognize the fact that these officers must live in better style than we do.

MRS. J. D. CRISPELL, Reporter.
Jackson Co.

GENOA FARMERS' CLUB.

Club met at the home of Mr. and Mrs. L. W. Fitch. Mr. Metz's paper on "How to Keep an Interest in the Club," brought out a lively discussion. Assign a practical subject to some person to open the discussion, and then have each member take part in the after discussion. Diverse opinions were expressed on this paper. Many thought it not best to expect to do too much at a single meeting. L. W. Fitch and C. Sweet were elected delegates to the State Association. Messrs. Dunning, Haller, Woodworth and Lawson to the County Association.

MRS. M. E. DUNNING, Cor. Sec.
Livingston Co.

WEST AVON FARMERS' CLUB.

Club met with Mr. and Mrs. L. C. Flummerfelt. Messrs. Wm. Fisher and Frank Dutton were elected delegates to the County Association, and brought back a favorable report of the meeting. L. C. Flummerfelt gave a good talk on the work of the State Association. B. J. Fuller was elected delegate to the same. In the discussion of the question, "Which pays better, potatoes at 25 cents or wheat at 60 cents?" it was generally agreed that potatoes stood the best show unless a man was handicapped by being too far from market.

Oakland Co. E. A. TUCKER, Cor. Sec.

GRASS LAKE FARMERS' CLUB.

Mr. and Mrs. Frank Dwell were elected delegates to the State Association. A general Thanksgiving program was rendered. The history of "Thanksgiving" was finely given by Mrs. Jane Taylor. We, who live in this now enlightened country, wonder what they had in the early days to be thankful for, on that bleak New Eng-

land coast. Although many of them had died from sickness, want and treachery of the Indians, yet they still trusted in that God whom they had come so far to worship according to the dictates of their own conscience. Of all our National holidays the Fourth of July and Thanksgiving lie nearest to the nation's heart. How thankful we as a nation should be at the termination of cruel war. We who live in this immediate section should be thankful that we live in the most prosperous part of the prosperous State of Michigan.

MRS. GEORGE FERGUSON, Reporter.
Jackson Co.

MARION FARMERS' CLUB.

Mr. and Mrs. F. E. Backus entertained the November club. The County Farmers' Institute question came up for discussion, as there is decided opposition on the part of some of the State officers to holding the County Institute again at Howell. The reasons may seem plausible enough to an outsider, but in view of the fact that Howell is the county seat and is centrally located, the sentiment among our members is unanimous that under any and all circumstances the County Institute should be held at Howell. A vote of confidence was also given to any action the county executives of the institute might take in the matter. F. E. Backus and L. K. Beach were elected delegates to the State Association and Messrs. Norton and Padley and their wives to the County Association.

Livingston Co. REPORTER.

Veterinary Department.

CONDUCTED BY DR. W. C. FAIR.

Advice through this department is free to our subscribers. Each communication should state history and symptoms of the case fully, also name and address of the writer. The initials will only be given. When an answer is requested by mail it becomes private practice, and a fee of one dollar must accompany the letter.

Cough.—A road horse has a cough. J. W. Monroe, Mich.—Give one dram fluid extract wild cherry and half an ounce fluid extract licorice twice a day until he gets well.

Worms.—Young horse passes worms. He is thin, hair long and rough. I feed him more than a horse of his weight should have. W. K. Lansing, Mich.—Give one dram powdered sulphate of iron and two drams ground gentian twice a day in feed.

Heifer Calved too Soon.—Heifer came in before she was due and lost her calf. Has not drained. C. L. W. Tipton, Mich.—Remove afterbirth by hand and inject her with a solution of carbolic acid, one part to one hundred parts tepid water, twice a day for a few days. Give her fifteen grains quinine three times a day for ten days. Keep her bowels open.

Cow Gives Bloody Milk.—My cow gives bloody milk from one teat. Have tried several remedies without benefit. J. W. St. Clair, Mich.—Blows on the udder or commencing inflammation from any other cause, heat or "rut," a sudden accession of rich food causing local congestion with increased flow of milk, are all causes. Be sure and give her a soft bed to lie on. If the udder is much inflamed give one pound of epsom salts, one dose only. Bathe the affected quarter with cold water. Milk carefully and gently.

Parturient Fever.—Two of my cows died. They were in good health. Calved all right, cleaned nicely and the calves ran with them two days. A few days later they lost the use of hind quarters and soon died. Stomach of one was clogged and milk dried up. E. W. Colon, Mich.—Both cows died the result of parturient fever. You overfed them before and after calving. Had you dieted them and given saline cathartics before and after calving I think you could have saved them both.

Cow Gives Bitter Milk.—Cow's milk has a bitter taste and an offensive odor after standing a short time. Cow has good feed and is well stabled; due to calve March next. A. S. Chesline, Mich.—Your cow's milk may absorb some vegetable poison after it is milked. If your cow is healthy her milk should be normal. Examine sewerage and ventilation and disinfect stables and milk house. Notice that no bad smelling substance is near milk, etc.

Wound.—A colt got cut on barbed wire and it has left a bunch on fetlock joint. The fungus bleeds and has not healed perfectly. J. H. L., Williamston, Mich.—Burn wound with a

red hot iron until center of fungus is lower than edges of skin. It is not possible for a wound to heal perfectly if a fungus is allowed to fill in between edges of skin and raise much above the level of skin. Also apply equal parts tannic acid, oxide zinc and calomel to wound twice a day.

Inverted Vagina.—Heifer's womb became displaced when she calved. She was treated for trouble and apparently recovered. She is due to calve in March. Is there danger of her having similar trouble this time? E. W. K., Tomahawk, Wis.—Keep her bowels open and elevate the rear part of stall so that her hind quarters will be three inches higher than front quarters. It will be wise to purge her before calving, and would advise keeping a surcingle around flank for a few days after calving. Keep her in the specially prepared stall for some time after calving.

Congestion of Lungs—Pneumonia.—Two of my "long wool" lambs died in field; three more not able to stand up and a number of the others sick. They were feverish; a heavy discharge from nose; quick breathing; walk with great difficulty. I opened every one of the dead lambs and found their lungs dark colored and full of blood; other organs all right. I now keep them up. F. E. M., Springport, Mich.—Your lambs died of lung disease brought on from exposure. I do not think you will lose any more if they are kept in a sheltered place, warm and well ventilated. More can be done to prevent the disease than by medication afterwards.

Cooking For Live Stock.

The cooking of food is in reality the first step in digestion. It means that cooked food is more easily digested and more readily assimilated—converted into blood, vitality, flesh fibre, milk, etc., by the animal economy. As all food is just so much fuel fed to the animal to be burned up and consumed by the process of digestion, the feeding of warm cooked food means the saving of a large amount of fuel—food.

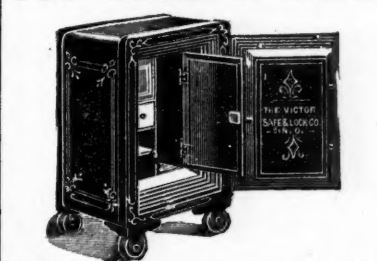
A good machine for that purpose is the Electric Feed Cooker made by the Electric Wheel Co., of Quincy, Ill., whose ad. appears on another page of this issue. The cooker which we show herewith is made in several convenient sizes ranging from 25 to 100 gallons capacity. The base is composed of the best of cast iron and the furnace is lined with steel plates effectively preventing all warping or burning. The boiler is made from best galvanized steel which will not rust or corrode in any way. Write the Electric Wheel Co., for price list and circulars before buying a cooker of any kind.

Needed on Every Farm.—The Dain Double-gear Mill grinds any kind of grain as easily and quickly as any other mill on the market, being so constructed that the inside burr revolves twice to one revolution of the sweep. The pressure between the burrs in grinding is carried on chilled roller bearings, reducing friction to the minimum and doubling the quantity of grist with the usual draft. Send your name and address for circulars and illustrations to Dain Mfg. Co., Carrollton, Mo.

Incubation Without Moisture.—Among the most successful in the incubator line is the Cyphers "No moisture—no ventilating pan" incubator. In this incubator a scheme for radiating the heat with the most thorough distribution and equalization of it is employed, and without the necessity of providing a moisture supply. Their large manufactory is thoroughly equipped and specially built for the manufacture of incubators and brooders and machinery especially adapted for the purpose is found in every part of it.

The Cyphers Company is located in Wayland, N. Y. Their new catalogue is a remarkably handsome book and should be owned and read by every poultryman. They send it for 10c. in stamps.

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Address THE MICHIGAN FARMER, Detroit, Mich.

Horticultural.

For The Michigan Farmer.
YOUNG TREES FROM THE NURSERY.

Very few fruit trees are transplanted from the nursery to the orchard without receiving some sharp set-back. I can remember the time when it was generally expected that out of every lot thus transplanted a fair percentage of them would die, and another percentage would drag along an uncertain existence for several years. But as the requirements of nursery trees, and the art of transplanting them, became better understood this amount of loss was materially decreased. It is now becoming more and more the prevailing opinion that there need be no loss at all, and that in the near future such will be the case. This, of course, presupposes great skill and care on the part of the shipper as well as the receiver.

A good part of the young trees arrive at their destination in poor condition for planting. This is sometimes due to the fault of the shipping companies. However, until both the nurserymen and transportation companies can be made to do better, the purchaser must try to make up for their ignorance or carelessness by special labor and treatment. Trees shipped from warmer latitudes to colder are more apt to arrive in poor condition for planting than others. These trees were probably heeled in, but the climate was so mild that they started to grow before they reached their destination. The best treatment that can be accorded to such trees is to get them into good soil as soon as possible, and without disturbing the new, white, hairy roots or fibers. The dead-like roots should be cut back to live roots. If the white fibrous roots are not injured they can be made to grow at once in soil that is thoroughly watered. I have received trees from the South early in the spring in this condition, and they were planted so carefully that the buds that had started on them made a satisfactory growth the same season.

The cutting back of the trees before planting is one of the best ways to protect young ones that do not appear very thrifty when received. I have cut them back two-thirds—almost cutting the tree down—and the trees did better for this severe treatment. In time they will grow faster, and produce better trees, than those that arrive in poor condition, and for the sake of saving the growth already attained are not cut back much.

Minnesota.

A. B. BARRETT.

For The Michigan Farmer.

MULCHING STRAWBERRIES.

"Under no circumstances must strawberries be mulched until the ground freezes hard. Plants continue to grow ever day until the roots are frozen, and they cannot assimilate their food without sunlight. If covered with straw now they would turn white in a week."—R. M. Kellogg, in Michigan Fruit Grower of October 28.

This advice of friend Kellogg's is undoubtedly good, and perhaps a person would lose nothing and gain much by following it; yet our experience has proven that strawberries may be successfully mulched before the ground is frozen hard, provided it is done in the right manner. About as successful a job of mulching as I ever did was done before the ground was frozen and while the leaves were yet green. At what time this mulch was applied I can not say as I have no data of the work done; however, I should judge that it was applied about November 1st. Some time after I had completed this job, when the leaves of plants not protected had become dried and withered by freezing and thawing, a neighbor fruit grower happened to call on me and as usual we went out to look at my strawberry beds. Upon removing the mulch we found that the plants looked just as fresh and green as when they first were covered. My friend said his vines were dead and that he wished he had got them covered before. The year following this I mulched before it froze up and with as good success. This time for some reason or other I threw the material off into piles, and it was some time before I got around to spread it, perhaps a month or more. Now I expected to find the plants directly under these piles injured, but contrary to my expectations they looked to be just as healthy, or even

more so, than those that had not been mulched. However, these were mulched later in the season than the patch of the year before; snow fell the next day after drawing off the mulch, and was just going off when I finished spreading, some time in February I think. Perhaps if I had applied this mulch two or three weeks earlier I would not have been as successful; but taking the conditions as they were I do not think I could have bettered the job. Both of the seasons here mentioned I used marsh hay for mulch and this is one of the best, if not the best mulch that can be used; it is coarse, and does not pack down like some other materials, thus admitting plenty of air although keeping out all sunlight. It is our opinion that it is not necessary for the ground to be frozen before applying the mulch, providing it is not earlier than November 10. For the past week we have been having those freezing nights and thawing daytimes that must prove injurious to those roots that lie near the surface, and whether this freezing and thawing comes in November and December or in March and April, I would rather my plants were covered. We have not applied a mulch to our beds as yet, November 17, except to draw on and spread four loads of manure. This we intend more as a fertilizer than a mulch, yet it will answer this purpose until such time as we may be able to draw on straw. We shall finish drawing on the manure as soon as the ground is frozen sufficiently to bear the weight of team and wagon, and finish with the straw as is convenient.

Perhaps friend Kellogg did not mean that the mulch should not be applied until the ground freezes hard,—to stay frozen. We do not think he did, for this rule would not work very well in those winters when it is freeze and thaw the entire winter through.

No set rule can be given for applying a mulch to strawberries, but we think it is safe to assume that when the time of the year comes when the leaves should naturally become dormant, the mulch may be applied.

St. Clair Co., Mich. M. N. EDGERTON.

FORESTRY IN THE UNITED STATES.

The new method of forestry work of the Division of Forestry of the Agricultural Department, as outlined recently by the Forester, Mr. Gifford Pinchot, has awakened considerable interest and bids fair to bear some practical results. Mr. Pinchot proposes to arrange with parties owning woodland to manage their timber for them, showing them how it is practicable to market the timber profitably and at the same time preserve the identity and value of the forest. This will be done without cost to the land owner and without pecuniary benefit to the Department. Mr. Pinchot assumes that the commercial lumbermen have reduced their methods to such a system that it becomes very difficult to improve on them from a money-making standpoint, but he proposes to show that whereas woodland, after they have "cut it" is practically worthless, by the expenditure of a slight sum per acre, a good second growth of valuable timber will be insured. Much interest is felt in his scheme and he already has arrangements made with private parties to operate on over seven hundred thousand acres of woodland. One hundred thousand acres of this is in the Adirondacks where an opportunity for a very fine object lesson is presented. At present it is not possible to cut the hard wood there and market it profitably; only the spruce is cut by the lumbermen. In cutting this species, however, such small trees are taken and such large areas left entirely blank of spruce that the succeeding second growth becomes very incalculable. Mr. Pinchot proposes in cutting over an acre to leave enough of the minimum sized trees marketable to act as seed trees and also to leave single trees standing in areas where there are no young trees; this he claims can be done at a cost, or rather loss of only six or eight cents per acre, while the identity of the species will be maintained in the forest, leaving it much more valuable.

Mr. Pinchot believes there is much room for good work along the lines of studying forest fires, their cause and effect. They largely affect the succeeding growth by killing the species and burning up seed. In most sections, if not everywhere, he believes it

possible with proper State regulations and good organization to successfully fight fires. Without organization fires are uncontrollable. He has studied the forest fires in parts of New Jersey where great areas have been literally burnt out. Fire always runs along in waves, throwing out spurs. The fighting and back-firing should be done in front of these spurs when the back stretches can be more easily dealt with. He finds the people of New Jersey fighting the back stretch first and trying to catch up with the spurs instead of going in front of them. The Forestry Division has active, aggressive work ahead for the coming year and the chief's motto is to make his experiments and examples practical, so that when put into operation by the forest owner, they will have an actual cash valuation.

HORTICULTURAL NOTES.

Toads should never be destroyed. They live on insects, snapping them up during the warm months by the hundred.

Looking for borers in the apple orchard once a year is once too seldom. During a period of six months these grubs will do great damage; the orchard should be thoroughly examined twice a year.

In an article in the Forum the chief entomologist of the United States Department of Agriculture estimated the annual losses from insects in the United States at \$200,000,000. We doubt this. If the insects had not destroyed tons of fruit the price of much of it would have been too low to pay for picking and marketing. Those who fought the insects successfully got much more for their fruit than if the insects had not destroyed the crop of those who did not fight them.

J. H. Hale, the great peach grower, says he gets peaches two weeks earlier by the following method: In the middle of the growing season put a strong wire around a large arm of a tree and twist it fairly tight. This checks the flow of sap and causes fruit buds to form early and in great number. The fruit on the branches of this arm will ripen two weeks earlier than that on the untreated branches and will be much more highly colored. But this part of the tree will be so weakened by the treatment that it should be cut away after fruiting that new shoots may come and take its place. Thus one large arm or limb of a tree may be forced each year.

John A. Barnes, United States Consul at Cologne, through the State Department, has, at the request of leading German merchants in American dried fruits, notified shippers in this country as to the absolute necessity upon their part of abstaining from the use of sulphurous acid or any other questionable preparation, for a persistence in or continuation of this practice will undoubtedly result in the entire expulsion of such fruits from the German markets. Herman Fettweis, a prominent German importer, who last year disposed of over 100,000 marks' worth of apricots alone, was recently cited to appear before the authorities of Neweild to account for the evidence of the use of sulphurous acid in a line of apricots there sold.

The government of New Zealand is pursuing in part exactly the policy which the officials of the Department of Agriculture insist should be enforced in Hawaii, Porto Rico, and any other island possessions which may come within the jurisdiction of the

United States, but are now in danger of being overrun with noxious weeds, and plant diseases, through ignorant and careless importations. The governor of New Zealand has issued a proclamation stating that whereas it has appeared to his satisfaction that fruit trees and plants infested with various species of scale insects have been and are still imported into New Zealand to the danger and detriment of the fruit plantations of the country, the importation is absolutely prohibited of any trees or plants, including cuttings, buds, etc., affected with scale insects. To enable thorough control of the inspection necessary the ports of Auckland and Wellington are designated as the only two ports for such importations.

A fruit which is likely to find its way into American markets since the tropical war, is the alligator pear, or, as the Spaniards and Cubans call it, Aguacate. The tree is very susceptible to frosts and has been nipped down time and again in Florida, where otherwise it does well. The Fruit Division of the Department of Agriculture has recently received a large amount of seed from Mexican trees which have been known to fruit after a temperature considerably below the freezing point, and will distribute them to South Florida and Southern California where this fruit has been tried. While the demand is not large, fancy prices are obtained from naval officers and others who have visited foreign lands and become fond of this fruit. In Washington these pears retail at 25 and 30 cents each. The fruit is totally unlike anything growing in the temperate zone and seems to be as much a vegetable as fruit, being used for salads. It has a peculiar flavor which is usually not liked at first, but the fondness for it becomes almost a mania with many travelers. The writer has eaten it in Florida and Nicaragua and believes there is no fruit in his estimation over which it does not take precedence. It is like a pear only in general shape, so says our Washington correspondent.

MR. ALFRED AUSTIN, Lord Tennyson's successor in the laureateship of England, will contribute to the next volume of The Youth's Companion a poem based on an extremely dramatic and picturesque legend, which is singularly suited for recitation. The story itself is full of interest and color, and the metre is so fluent that even a child can recite the verses with ease and effect.

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The Dairy.

Conducted by J. H. Brown. Every reader of The Michigan Farmer, who is interested in dairy matters, is earnestly invited to frequently contribute to this department. Send all dairy correspondence to Battle Creek, Mich.

For The Michigan Farmer.

SOME COW GOSSIP.

I have recently become quite interested in experimenting with a couple of cows which I possess. One is a high grade Jersey, her sire being a registered Jersey bull of St. Lambert lineage and the dam a high grade and a very excellent cow which had eight calves and never went dry a day in ten years. The other cow is a half sister, but her sire was a Holstein of excellent breeding. Her milk is about equal in quantity to the other, but is not as rich as that of the Jersey.

These cows both came in before they were two years old, and have had but one calf apiece. One is now milking for the fifth winter and the other has about completed four years of giving milk continuously. They have very rarely missed a milking through any mischance, but for three years, up to about September 1 just passed, they were milked but once a day, as I did not wish to milk myself, and my son, who milked, could not be tied down to always being at home at milking time at night; besides I am more often gone at that hour in summer than at home.

About September 1 I was temporarily without a housekeeper, and suggested to my neighbor, who makes fancy butter and was short of milk, that he take my milk and pay what he could afford to until we could once more make use of it at home. He accepted the offer and in this way I came to weigh the milk and know something about it.

On the 7th of the month my oldest son left to enter the State University and the milking lay between myself and younger son, eleven years old, who had never milked. In order that the cows' bags would not be so hard and full for the boy to milk we began to milk twice a day. After the change the cows gave from two to three pounds more daily than before, the yield being from twenty-four to twenty-seven pounds daily, according to who milked.

I went to market five days each week, going at 4 a. m., so the little boy milked, and sometimes at night when I was very busy. Sundays and Mondays I milked to give him a rest, as it was quite hard work to him, apparently, and we noticed that on Monday, after I had milked the day before, that the cows increased their flow about three pounds.

After the middle of October I could milk all the time, and I began to become interested in bringing the cows back to their August flow. In the mixed milking and neglect of the thirty previous days they had fallen off to less than twenty pounds daily. By October 30 I had got them back and a little more, and the amount given in thirty days, from October 30, is six hundred and ninety-four pounds. Adding half a day to make an average month, would make an annual yield of 8,400 pounds of more than ordinarily rich milk for two small cows which calved four and five years ago. Whether they will do this I cannot say. All I know is that in June and July they filled to the brim a thirty-pound pail, while in February and March, upon dry corn stalks and hay, without other messing than a peck of turnips daily, they fell below ten pounds.

During the time my cows were gaining, my neighbor's cows were constantly shrinking, and to show that it was not all caused by strippers drying off, is the fact that since he shut them up and has been feeding ensilage and mill feed in a warm stable, they have gained in a week nearly all they shrunk in three weeks. This morning I received notice that if their cows continued to improve they would not need my milk after December 1. I believe with proper care through October and November his herd of sixteen cows might have produced the 1,300 pounds of milk he paid me 80 cents a hundred for.

Both his cows and mine were in good pasture, but I had a large lot of sweet-corn nubbins and I fed a heaping peck measure twice a day to the two. He tried feeding ensilage at night, and I tried bright corn fodder, but the cows would not eat while the weather re-

mained warm, as it was until November 22. From the middle of October until November 22 my cows had a crate of cabbage leaves daily with "busted" heads and second-growth loose heads from those cut in July. Of the latter I had three thousand heads, so I had an abundance and could feed as freely as I dare.

The crate held a bushel and one-half of potatoes, and the cabbage was tramped in solid so the cows consumed about 75 pounds of cabbage daily, and it was impossible to detect any odor or taste of cabbage in the milk. One morning, through my neglect to tell my boy, they got a double portion, which I did not know about until after feeding at night, and I feared bad results, but could not detect any. I now believe that if a cow is fed immediately after milking, that 50 or 60 pounds daily may be fed without tainting the cream, and that, considering the cheapness with which cabbages can be grown, it certainly would pay milk producers who retail their milk to grow a patch for fall feeding. Whether it would do to feed heavily to an entire herd of butter cows I cannot say from any experience of my own.

There was still another reason why my cows did better than my neighbor's after the middle of October, and that was I sheltered them every night, and on stormy days let them out only three or four hours. A cow will stand about that much duration of storm without suffering, if she is then put in a warm stable where she can dry off without chilling. Put a cow out in the rain for all day and perhaps all night and she suffers severely in cold autumn storms, and it very soon registers a loss in the milk pail.

As regards keeping them up at night, I cannot see the desirability of chasing all over a pasture before dawn in a frosty October night to find the cows. It is after dark when they are turned out at night and the cows do nothing but hunt a sheltered spot to lie down, where they are found in the morning. In driving to the stable they empty themselves of both liquid and solid substances which might much better be left in the stable and made to contribute to the manure heap which, at best, is always too small. I might add that the cows have gained steadily in flesh for the last three months and are nearly fat enough for beef. They have enormous appetites, and since I shut them up, they get away with a large amount of bright corn fodder.

I am agreeably disappointed in their production since winter set in (seven days ago), and they have had no grass and only four crates of cabbages. I expected a severe shrinkage but in the seven days it has only been four pounds, and part of this may be attributed to the fact that one cow was in heat, and she always shrinks some during that period.

I have thought each year I would fatten these cows on grass and dispose of them, but I think so much of their race, and they come back so nicely to a full flow of milk, that I have not done so. Besides I have been hoping against hope that I might get some calves to continue the strain.

I have about given this up, as the black one does not come in heat at all, as I can see, and the other one does not breed, although coming in heat regularly every twenty-one days. She goes nearly crazy at such times, but repeated service from several different bulls has accomplished nothing up to date.

Now, Friend Brown, I have written you a long letter, and all I have written is solid fact. There are several morals to be gotten out of it, besides the curious truth that some cows do not have to have a calf every year to be pretty fair milkers. The morals are, that experienced, kindly milking, shelter from autumn storms and frosty nights, and good messing, with some appetizing food when the pastures become short or frosted, gives good and quick returns in the milk pail.

Summit Co., Ohio.

L. B. PIERCE.

(These cows are exceptional, in that they have given a generous quantity of milk for four or more years without calving. We have heard of this being done in the case of spayed heifers or cows. Who else has had such an experience?)

It is somewhat unusual for cows to return to, much less exceed, their original flow after such irregular milking and feeding, especially when so far along in lactation as these two cows were.

We would much prefer the sweet-corn fodder, with a few roots added

later in the fall for succulence, than to feed cabbage. Keep that cow by herself a few times when in heat, away from other stock, then allow a single service. Report in due time.—Ed.)

For The Michigan Farmer.

THREE ESSENTIAL CONDITIONS.

In your issue of November 19, you invite your brother farmers to write of their method of caring for the dairy. There are three things that go to make up a profitable dairy herd. Individual merit, feed and care, and the kind of care they receive has a great deal to do with it.

You ask, "Do you keep your cows in the stable during the cold stormy nights?" Most certainly we do. Our cows never lie out of doors over night, summer or winter. You will find them at night lying comfortably in their stalls.

Our stable is well ventilated and the cows are well bedded all of the time. In that way we make, even during the summer months, quite an amount of valuable manure.

In the early fall we keep watch of the weather, and if there comes a cold windy day we keep the cows in most of the day. I remember one day this fall my hired man and myself were picking up potatoes. It was rather cold and windy. The cows had been turned out at noon and the gate being open they all went for the pasture. I felt rather uneasy about them, and finally said: "Mike, we are losing money every minute those cows are out in this wind." I went right away and drove them to the barn and put them in. They were very willing to go in, although the feed in the pasture was good.

As I sit writing tonight there is a howling blizzard outside, but my cows and calves are just as comfortable in the stable as I am sitting here in the house.

WATERING.

In summer our cows drink from the tank in the yard, fed from a ten-barrel tank by the horse barn. In winter they are watered in the stall with a pail, water coming from an elevated tank in the loft of the main barn through pipes to the head of the cow mangers. To my mind this is far ahead of watering in the yard during the winter.

They are watered twice each day, and as they stand waiting for their turn there is nothing else to attract their attention. They drink from a clean pail, water that comes fresh from a clean tank. As milk is over 80 per cent water, in my estimation it is quite an item to get a cow to drink heartily twice each day. How nice it is in a day like this, with the wind blowing a gale and the snow flying through the air, to have water in the warm barn, instead of compelling the cows to go out in the storm.

FEED.

This winter we are feeding corn stover, cut by a feed cutter run by a twelve-foot power windmill, and all that they will eat up clean of clover hay at noon. For grain we feed corn meal (corn ground by same mill) about four pounds; of wheat bran three pounds and of gluten feed three pounds. Some get more and some get less, but that is the proportion.

The milk is run through a cream separator having a capacity of 400 pounds per hour. The cream is made into butter and sold to private customers in Grand Rapids, at 20 cents per pound the year round.

Ottawa Co., Mich.

F. M. LUTHER.

(Why cannot a host of our dairy farmers write us such letters as this, giving their actual experience in farm dairying? If you do not agree with what your brother farmers say in these columns, give us your reasons. Let us candidly and thoroughly review the situation.)

Now we have a few important questions to ask, and we wish to secure a score or more of replies. Ought not every good buttermaker to refuse to take butter to the store and exchange for groceries? Do you practice this plan, and are you satisfied with it? Can you suggest any improvement?—Ed.)

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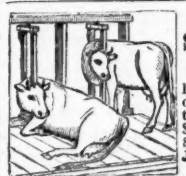
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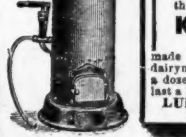
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DETROIT, SATURDAY, DEC. 10, 1898.

This paper is entered at the Detroit Postoffice as second class matter.

THE BEST AND CHEAPEST.

We are mailing a large number of sample copies to names sent to us by friends, and of those receiving these samples we ask as a favor a careful examination of the paper.

For only 60 cents it will be sent every week until Jan. 1, 1900, giving the balance of this year free, and at this price it is without doubt the cheapest farm paper published, not even excepting the small monthlies, which are of no practical value to a progressive farmer; and the position we have taken in placing the price at 60 cents, saving to the subscriber the large commissions formerly paid to agents, is meeting with the heartiest support.

Why not accept this opportunity of securing for yourself the weekly visits of The Michigan Farmer for the balance of this year and all of next when it can be had for such a small amount? Address,

THE MICHIGAN FARMER,
Detroit, Mich.

THE PRESIDENT'S MESSAGE.

The message sent to Congress by President McKinley on Monday last is one of the most important documents ever sent to that body. Its importance comes from the momentous events which have occurred since Congress adjourned, and the grave questions which must come before that body for final settlement. While there are many important matters relating to internal affairs, the main interest centers in the reference made to our foreign relations, and the results of the war with Spain. A summary of the events connected with the war takes up a considerable part of the message, and makes the document quite lengthy. His praise of the army and navy, after a recapitulation of the great work they accomplished, is generous and hearty.

In referring to the results of the war the President is necessarily hampered by the fact that the treaty of peace with Spain is not yet completed, and this makes his utterances on the subjects involved less direct and positive than usual. Then there is seen in what he does say a willingness to allow Congress to consider the various questions without attempting to lead the judgment of members to follow a special line of policy which he had decided to

be right and proper. It is apparent that he is more anxious to have a line of policy followed which will prove the safest and best for the country to pursue rather than secure the adoption of a course which is in consonance with his private opinions. He is American enough to understand that the final action of a body like Congress, with representatives from every section of the Union, is more likely to prove correct, where entirely new questions are to be settled, than the best judgment of any one individual. His utterances regarding Cuba are strictly in accord with the views outlined by Congress at the outbreak of the war, and will serve to show the Cubans themselves as well as the powers of Europe that the views of Americans have not changed regarding that island and its people. He says on this subject:

As soon as we are in possession of Cuba and have pacified the island, it will be necessary to give aid and direction to its people to form a government for themselves. This should be undertaken at the earliest moment consistent with safety and assured success. It is important that our relations with these people shall be of the most friendly character and our commercial relations close and reciprocal.

It should be our duty to assist in every proper way to build up the waste places of the island, encourage the industry of the people and assist them to form a government which shall be free and independent, thus realizing the best aspirations of the Cuban people.

Spanish rule must be replaced by a just, benevolent and humane government, created by the people of Cuba, capable of performing all international obligations, and which shall encourage thrift, industry and prosperity, and promote peace and good will among all of the inhabitants, whatever may have been their relations in the past.

Neither revenge nor passion should have a place in the new government. Until there is complete tranquillity in the island and a stable government inaugurated, military occupation will be continued.

Which practically means that having interfered to put an end to misrule in Cuba, that position must be maintained until the people of the island show that they are capable of self-government, when American troops will be withdrawn and the Cubans left to manage their own affairs. This position of the President will meet the approval of a large majority of the American people. We must have peace on that island, and it should be insisted upon, no matter whether the government is Cuban or Spanish.

No position is taken regarding the Philippines, no doubt because the treaty under which they are to be ceded to the United States is yet under consideration.

The President favors an increase of the regular army, and a strong addition to the navy. He deems both these suggestions an absolute necessity in view of the changes which have taken place in our foreign relations.

The President reviews the relations existing between this government and those of Great Britain, Russia, France, Turkey, Mexico, Chili, and other South American republics, and says they are generally friendly, and that such matters as are in dispute are in course of settlement.

One important matter discussed in the message is the currency. Regarding that the President says:

In my judgment the present condition of the treasury justifies the immediate enactment of legislation recommended one year ago, under which a portion of the gold holding should be placed in a trust fund from which greenbacks should be redeemed upon presentation, but when once redeemed should not thereafter be paid out except for gold. It is not to be inferred that other legislation relating to our currency is not required; on the contrary, there is an obvious demand for it. The importance for adequate provision which will insure for our future a money standard related as our money standard now is, to that of our commercial rivals, is generally recognized. The companion proposition that our democratic paper currency shall be kept safe and yet be so related to the needs of our industries and our internal commerce, as to be adequate and responsive to such needs, is a proposition scarcely less important. The subject, in all its parts, is commended to the wise consideration of Congress.

The greater interest generally taken in foreign affairs will probably keep the currency question somewhat in the background, but its great importance

will surely bring it forward in time. Under present satisfactory trade conditions, where the relative value of gold and silver, greenbacks and national bank notes, is easily maintained, most people will think it best to leave well enough alone. The suggestions of the financiers who met some months ago at Indianapolis, indicating a radical change in the currency by the retirement of the greenbacks and the issue of national bank notes to replace them, are not likely to find favor with the majority of Congress, and we do not look for any "reform" of the currency along the lines indicated.

Taking the message as a whole its utterances will commend it to the majority of conservative citizens, and renew their confidence in the wisdom and discretion of the President.

NOT GOOD ADVICE.

We believe that the farmers in the country are making a serious mistake in trying to force their cattle into the market just at this time. It is true that they are fat and in good condition but it is none the less the poorest time in the year to sell. In the fall it is nearly always the case that every farmer's stock is fat, the temptation to sell is strong, it is put on the market, and the result is that the price is forced considerably below what it otherwise might be. It is true that if we were so situated that shipping could be done at a profit, it would remedy this somewhat, but not entirely. Any farmer in Alpena county who has cattle ready for market, can easily keep them in the same condition for a few months longer, which means both increased weight and generally advanced prices, and make his stock easily pay him \$5.00 to \$15.00 more a head than what it will bring him now. Any farmer can readily see the value of a good bunch of cattle in January, February, or even in March, when nearly every man in the country has sold out his stock. This will be true of only steers and cows, as no other class will find favor with either butchers or shippers. The same thing is true of lambs. Instead of selling them now at an average weight of from 50 to 70 pounds, at \$3.00 to \$3.50, it will cost but little more to feed them 60 or 90 days longer and sell them at from \$4.00 to \$5.00 or \$5.50 at an average weight of from 80 to 100 pounds. This can only be true of ewes and wethers. There are no kind of conditions under which it will pay a farmer to waste his time with any other class. —Alpena Pioneer.

The above extract, which appeared in a recent issue of the Pioneer, while undoubtedly written with the intention of giving good advice to its farmer readers, will, if followed, prove very injurious to their interests. Under present market conditions it is the smooth medium weight young cattle that are demanded, and which bring the best prices. These are also the cattle that make the best return to the feeder. If a steer can be put on market with only the cost of one winter's keep to be deducted from his selling price, it will be seen that the cost of production is cut down very materially. Then the steer under two years of age puts on weight more quickly than if over that age. With increase of age comes increased cost of making gain in weight. If to this is added loss of price because the steer has got too heavy and carries too much fat, we fail to see how any feeder can afford to hold cattle once they are fit for market. Another great advantage in pushing cattle while on feed is that the money invested in them is got out more quickly, and can be used either to purchase more stock cattle, or in any other direction necessary. The farmer with a bunch of cattle on hand ready for market, is generally short of ready money because of the cost he has been to in buying and feeding them. For him to hold them some months longer, and perhaps borrow money to carry them along, would be a great mistake, even if the market should advance a little, and that is a contingency that is not at all certain. At the present time cattle—good cattle—are selling even above a fair price. To expect prices to advance sufficiently to make good the cost of carrying cattle already fit for market, to or three months longer, is nearly sure to result in disappointment. The promised shortage in

cattle at the west has not yet made itself felt. On the contrary, receipts are very heavy at such markets as Kansas City and Chicago, the only shortage being in the finest grades, which are the only ones the farmers of this State should be putting on the market.

When we come to lambs the reasoning in the article is still more erroneous. The prices and weights quoted for lambs are far from being in accord with the actual sales in the Chicago, Detroit, or Buffalo markets. The ideal weights for lambs, the weights which bring the top prices every week, range from 75 to 85 lbs.. A hundred-pound lamb, equal in quality with one weighing the amounts named, will be discounted 25 to 30 cents per hundred. If a farmer has a bunch of nice lambs which average about 80 or 85 lbs., they should go to market at once. With the usual shrinkage they will reach Buffalo in the condition to get the top price, provided they have been well finished and are of choice quality. To feed such lambs any longer would be simply to throw away feed and time.

It is a safe system to follow to market live stock just as soon as it can be got in proper market condition. For that reason good judgment is required in selecting stock for feeding. It will save time and feed because it matures more quickly, and when put on market it secures the best prices because it has the quality wanted by the butcher and consumer. All the feed and care possible cannot put this quality into a scrub. To hold such stock after it is in shape for market is to throw away the advantages which come from early maturity and good feeding. No good business man will ever follow such advice.

SUGAR BEET CONTRACTS.

Commissioner French, who is charged with the enforcement of the beet sugar law passed by the last legislature, very properly calls attention to the violation of the terms of that law in contracts prepared by the owners of certain factories. These contracts have been issued by the promoters of factories which are to be built in Monroe and Oakland counties. Two parties from Oakland county called at The Farmer office the past week to discuss these contracts. One had refused to sign the contract offered him because it stipulated that the analyses made by the factory's chemist should be final. We advised him not to sign such a contract, and also said we very much doubted if the manufacturers could collect the State bounty upon sugar manufactured from beets secured under such a contract. Land Commissioner French makes this very plain in the statement he has given out to the press. More important still is the fact that in these contracts there is a scaling down of the price per ton fixed by the law to be paid by manufacturers before they are entitled to the bounty offered by the State. It is singular that business men should attempt to openly set aside the provisions of a law under which they are entitled to very material benefits. They are placing themselves in the position of defying the provisions that do not suit them, and then claiming benefits under this law which can only be secured by obeying it. Commissioner French's statement is so clear and comprehensive, and the subject is one of so much importance to our readers, that we give it in full:

Letters have been received at this office from farmers, who make inquiries concerning the contracts which parties are making with the farmers of Monroe and Oakland and adjoining counties, for the growing of sugar beets. I have examined the contracts and although the contract being made by the Monroe parties says: "The intent of this contract is to conform with the law of Michigan, offering a

bounty for the manufacture of beet sugar," I find that it does not.

The law enacted by the last legislature offering a bounty of one cent a pound upon all sugar manufactured in Michigan from beets grown in Michigan, provides that "the manufacturer shall produce good and sufficient receipts and vouchers to show that at least \$4 per ton of twenty hundred pounds has actually been paid for all beets purchased, containing twelve per cent of sugar" and "a sum proportionate to that amount for all beets containing a greater or less per cent of sugar." The manufacturer must pay the following prices for beets in order to obtain the bounty under the present law:

Beets containing 10 per ct.	\$3.33 1-3	per ton
Beets containing 11 per ct.	3.66 2-3	per ton
Beets containing 12 per ct.	4.00	per ton
Beets containing 13 per ct.	4.33 1-3	per ton
Beets containing 14 per ct.	4.66 2-3	per ton
Beets containing 15 per ct.	5.00	per ton
Beets containing 16 per ct.	5.33 1-3	per ton

The law makes no discrimination as to the co-efficient of purity of beets. The same price is paid for beets with a co-efficient of purity of 75 as for those of a purity of 85, should the per cent of sugar be the same. The following prices are set forth in the contract being made with the Monroe farmers in the name of John N. Francis:

Per cent.	Co-efficient of purity.	Price offered in contract.	Price required.
14	75	\$4.00	\$4.66 2-3
13	78	4.00	4.66 2-3
13	76	3.75	4.33 1-3
12	79	3.75	4.00
13	75	3.50	4.33 1-3
12	78	3.50	4.00
13	74	3.25	4.33 1-3
12	77	3.25	4.00
10	75	3.00	3.33 1-3
10	72	2.50	3.33 1-3
13	82	4.25	4.33 1-3
14	80	4.50	4.66 2-3
15	80	4.75	5.00
16	80	5.00	5.33 1-3

It may be seen that there is not an instance in which the company agrees to pay the stipulated price for beets and the State will not pay any bounty upon sugar manufactured from beets secured under such a contract and paid for accordingly. Inasmuch as the contract says that the intention is to comply with the law, it is my opinion that it will not be possible to hold the farmers to their contract, as the contract does not comply with the law.

The contract further agrees: "That all analyses made by John N. Francis shall be accepted as final, it being understood, however, that the farmers are at liberty to select and employ, at their own expense, any competent chemist to whom John N. Francis shall give free access to his beet laboratory for the purpose of checking the test made by the chemist in the factory." Along this line the law says that the State Land Commissioner shall appoint suitable weighmen and inspectors and assistants who shall weigh all beets received at factories, select samples of beets for the purpose of determining the amount of tare and "he shall also test, or cause to be tested, said samples to ascertain the true per cent of sugar they contain, and make a record of same." These men although appointed by the land commissioner, are paid by the manufacturer, but are required to give bond in the sum of \$2,000 contingent upon the faithful performance of his duties.

Inasmuch as the law places this new industry in the charge of the State Land Commissioner, so far as the State is concerned, this department will see that the letters of the law are carried out by those claiming bounty from the State. There is no way in which the manufacturer can evade the law and then secure the bounty offered. Every term of the law must be complied with before the State will pay any bounty. Producers of beets whose contracts do not provide for the payment of a price for beets to the amount as given in the above table may know that it is not the intent of the company to comply with the law. Unless the law is complied with the farmer has no guarantee that he will receive a stipulated price for his beets, as the manufacturer can pay whatever prices he pleases for his beets, so long as he does not expect bounty from the State for sugar manufactured therefrom.

The beet sugar industry in Michigan, although practically only an infant, is proving a great success. The industry is proving to be profitable to all, especially to the producers of beets, who are receiving a profitable amount for the crop. It is to be hoped that numerous factories will be constructed in Michigan.

PUBLIC AFFAIRS.

The students at Princeton University have unanimously decided to abolish every form of hazing at that institution. The movement is said to have been voluntary on the part of the students, and their action is regarded very favorably by the faculty and trustees of the university. If other educational institutions will follow this lead of Princeton, it will put an end to a disgraceful and cowardly system of intimidation and personal abuse which has not a single good reason for its existence.

The Railroad Gazette states that the Carbondale and Honesdale gravity railroad, operated first by horses, and later by stationary engines and cables, is to be discontinued because of the changes in the transportation of coal. The road was built in 1829, before locomotives came into use. It was on this road the first locomotive was placed which ever ran over a track on this continent. The road is only 26 miles long, and the grades very steep. The locomotive referred to was brought from England in 1829, and was provided with two walking beams,

like those of some river steamboats, with connecting rods attached to cranks on the driving wheels. These wheels were made of wood, like wagon wheels, and had iron tires. There has been some progress in railroad and locomotive building since the appearance of this pioneer, and yet not many years have elapsed since then. What a contrast between such a locomotive and the cars then in use, and the limited express trains which now run between New York and San Francisco, in which the traveler enjoys all the comforts of a modern hotel while journeying at the rate of 40 miles an hour.

An American citizen, one Frank Knaack, of New York, has been arrested and imprisoned in Germany for "lese majeste," that is, speaking disrespectfully of the German emperor. The particular charge against him is that he referred to the emperor as "a big calf's head" in a public restaurant. Mr. Knaack, who is a civil engineer, and an educated man, denies emphatically that he ever referred to the emperor in such terms; but the police spy, who seems to be ubiquitous in Germany, and is always watching for an opportunity to distinguish himself, insists that he did. Mr. Knaack's friends, who were present with him at the time, endorse his denial. All the same he is in prison, and his bail has been increased to nearly \$4,000. The punishment for the offense is one year in prison. His trial is expected to come off about the 15th of this month, and no doubt he will be convicted, as the German officials have such a deep dislike to everything American. We will see what our government has to say regarding the treatment accorded Americans in that country, and whether Minister White, who is always assuring us of the cordial feelings existing between the two governments, will be able to secure justice for Mr. Knaack.

The general condition of business in the United States seems to indicate a degree of prosperity much in advance of the past five years. R. G. Dun & Co., in their review of trade on Saturday of last week, say the report of failures for the month of November is extremely gratifying, "because it shows not only a decrease in number and a smaller amount of liabilities than in any other month, excepting three summer months, since the monthly record began, but because careful analysis shows a striking improvement both in the small and in the large failures, and in nearly all classes of industry and trade. Considering that failures are unusually small in the summer months, the monthly return for November may be considered about the best ever made, and shows a condition of financial soundness rarely surpassed." Bradstreet's report, issued on the same day, was equally flattering. It said: "The business world enters on the closing month of the year with so many favorable and so few depressing features in sight as to leave little doubt that the year 1898, as a whole, must hereafter furnish the basis for estimate when comparisons of large business are to be made. Nearly all obtainable statistics and reports as to the volume of business point to the present year having heavily exceeded any former year in the amount of business done, and though comparisons as regards prices are not so favorable as in earlier years, notably 1892 and 1890, when quotations of most staples were considerably higher, still the expansion of trade, due to increased population and enlarged foreign demand for our products, has resulted in an aggregate volume of business done considerably in excess of any former year."

Detroit's snowstorm on Sunday night proved a costly experience to transportation, telegraph and telephone lines, all of which had their business more or less impeded, and in some instances entirely suspended. The big telegraph poles in the city, with their immense loads of wires, and covered with a heavy load of damp snow, in many instances were overturned, and the work of restoring them has not yet been completed. The trolley lines in the city had to suspend operations, and those from outside were not able to get through until morning. For twelve hours the city was practically shut off from telegraphic and telephone connection with other points. The breaking down of the poles brought down also live electric wires, and several horses were killed by coming in contact with them. A rough estimate of

the loss is \$110,000, but by the time everything is again in working order the losses of the various companies may reach double that amount, when the loss of business is added to the cost of repairs. The result emphasized very strongly the necessity of putting wires underground, something the city officials have been trying to do for the past ten years, with hardly enough success to warrant them in continuing their efforts. The underground wires continued to work without interruption.

LETTER FROM THE STATE DAIRY AND FOOD COMMISSIONER.

To the Editor of The Michigan Farmer.

Permit me a line in your columns to the farmers of Michigan, and those through whose instrumentality the anti-color oleomargarine law was enacted. The law went into effect Sept. 1st, 1897, and its enforcement was attempted by the Dairy and Food Department. After a vigorous and stubborn fight it became evident that the law could never be strictly enforced until the State Supreme Court should pass upon it. Accordingly the Department so moved that two cases were argued and submitted in the Supreme Court on the 19th of March, 1897. Tuesday night at 6 o'clock the Supreme Court handed down its opinion, declaring the law invalid for the reason that at the time it passed the legislative body it contained no enacting clause. The constitution of Michigan says, in Sec. 48, Article IV, that "The style of the laws should be, 'The People of the State of Michigan enact.'"

It seems that this oleomargarine bill was introduced in the Senate without these words, "The People of the State of Michigan enact." The Supreme Court in its opinion intimates that were it not for this flaw the statute would be constitutional; therefore it is fair to presume that the next legislature will re-pass this measure, and that it will become a valid law upon the books. However, this cannot take place before Sept. 1st, 1899, since by a constitutional provision all acts of the legislature, unless passed by a two-thirds majority, do not become operative until ninety days after the close of the legislative session. It is fair to assume that the session will not close before June 1st, therefore nothing could be done with the statute until Sept. 1st. In the meantime we are to allow the sale of colored oleomargarine without restraint throughout the State? We of the Dairy and Food Department have determined to prosecute the sale of these goods under a section of the general food law which reads: "An article shall be deemed to be adulterated within the meaning of this act if it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is." We expect to begin a number of cases before the 15th of the month. We have today secured an opinion from one of the leading criminal lawyers of the State, as well as from several prosecuting attorneys, that the section referred to covers the sale of colored oleomargarine. We shall therefore take up the fight and endeavor to prevent the sale of this contraband product until the legislature in its wisdom shall re-pass the anti-color statute; but the writer is of the opinion that this effort to prevent the sale of colored oleomargarine will need the support and endorsement of every friend of fair play and honest butter in the State. Furthermore, a movement to bring about the proper passage of the anti-color measure by the next legislature is very advisable, and, Mr. Editor, allow me the suggestion that it is time the dairymen and farmers of Michigan moved in a concerted and unanimous way to protect their products. I am a believer in organization and method. Strong in this belief, I cannot but recommend that the various farmers' organizations, such as the Grange, the Associated Farmers' Clubs, and the State Dairymen's Association, should take up this fight upon fraudulent products, and through their representatives in the legislature, exert all their influence for the re-enactment of this law, and its proper enforcement. Now is the time when the Dairy and Food Department in this State needs your support if it is to accomplish the mission you intended it

should. It is well known that a tremendous effort was made to defeat the enactment of the anti-color law at the last session. In the writer's judgment—and he believes himself competent to pass judgment—a much stronger effort will be made to prevent its passage at the coming session.

The point upon which the law was declared invalid was brought to the attorneys for the oleomargarine corporations by a paid lobbyist who had worked in the last session against the passage of the anti-color law. During the thickest of the fight in Grand Rapids, he gave to the oleomargarine attorneys the information that the law had been passed without an enacting clause. I tell this to show how sharp and vigorous an opposition is to be expected this coming winter.

The Department's case regarding the constitutionality of the vinegar law in the Supreme Court was also among the decisions handed down Tuesday. Unlike the oleomargarine decision, the Supreme Court stood for every contention made by the Department, and declared the conviction secured in the Grand Rapids Circuit Court a valid one. This case was brought against the largest vinegar concern in the United States, and conviction was had after two trials in the Grand Rapids courts. This sweeping decision probably puts an end to all controversy as to the constitutionality of the vinegar law.

ELLIOT O. GROSVENOR.

A SPLENDID ENDORSEMENT.

Greenville, Mich., Dec. 5, 1898.

To the Editor of The Michigan Farmer:

Dear Sir:—In remitting my subscription, I wish to state that I think your plan of dispensing with the middleman is admirable, and should increase your subscription list.

Though not a farmer, still I find The Michigan Farmer a most helpful paper. I count it among the best educational journals published. I should think it would be as indispensable to teachers of rural schools as to farmers.

Very respectfully,

F. D. SMITH, Supt. City Schools.

Monroe is to have a chicory factory if farmers will contract to grow 600 to 700 acres of the plant annually. The promoters claim \$6 per ton will be paid for all grown. There is one in operation at Bay City, and it is reported to be doing a good business.

Reports from the farmers who have grown sugar beets the past year continue to be very favorable. Two farmers in Tawas township, Iosco county, put in six acres of beets last spring, and they harvested 110 tons of beets, which analyzed 13½ per cent at the Bay City factory. For the crop they received a total of \$522, or an average of \$87 per acre. The result was so encouraging that a large area is likely to be put into beets next season by the farmers of that county.

A peculiar and interesting case was decided the past week in the Oakland County Circuit Court. It was begun nearly a year ago by Stephen Baldwin, a Detroit capitalist, against Fred A. Baker, lawyer, stock-breeder, and jolly good fellow. Baldwin tendered Baker in payment 364 silver dollars to discharge a mortgage for that amount on his farm, which Baker refused to accept. Baker took steps at once to foreclose the mortgage, and Baldwin filed a bill in chancery asking that the mortgage be discharged, since he had tendered the payment to Baker. The case came up before Judge Smith, and his decision was that the tender of the silver in payment for the mortgage was good, and he accordingly ordered the mortgage discharged as paid. Of course the case will be appealed, and after it has been passed upon by the State Supreme Court it may go up to that of the United States. It is evident Judge Smith holds that the silver dollar is a legal tender, and we can't see how any court can hold differently. But Mr. Baker is a far better lawyer than the editor of The Farmer can ever hope to be, and he is a fighter besides; but we are afraid the crafty Baldwin has, in the words of the ungodly, "done him up."

The Household.

CONDUCTED BY MRS. ELLA E. ROCKWOOD.

We should be pleased to have any of our readers who take an interest in household topics send in their views and opinions upon any subject which is under discussion, or which they wish discussed. The invitation is general, and we hope to see it accepted by many. Address all letters "or The Household to Mrs. Ella E. Rockwood, Flint, Mich.

HOME.

It is good to have a corner just to call one's own. Though it be a nest in branches by the west wind blown; Though it be a crooked window under mossy old eaves, Known but to darting swallows and to autumn's drifting leaves;

Though it only be a little room of four bare walls, Caught in 'mid smoky chimneys and the city's noisy calls. The heart may rest awhile, and the soul may be alone, If yet one has a corner just to call one's own.

The busy world is beckoning and lures us away, And life seems all to-morrow, though 'tis leaving us to-day; But there's nothing half so rare, in the golden days to come, As a little roof, a low roof, that we call Home.

There is nothing half so precious in the wide world and free, As the dear hearts, the near hearts, close to you and me,— Oh, when the dream is broken, and a wandering we roam, We'll find no other shelter like the one called Home!

Fame may be awaiting us, and glory on the way, But the humble things, the sweet things, are ours every day; And for loss or for gain, there is nothing can atone Like a heart and a corner just to call one's own!

HOME CHATS WITH FARMERS' WIVES.

BOOKS FOR GIRLS.

"Will you kindly tell us through the Household of some good books for girls? Not real small girls, but girls in their teens. Would like something which, while interesting, will be of some benefit to them. Please give names of authors."

Thus reads a note from one of our Household mothers, and it is with pleasure that I respond, for if there is anything I like to do it is to help young people to acquire a taste for good reading. There is a great deal of truth in what Mrs. Grace said in her article last week about a taste for trashy literature being hard to overcome, and the best way to do is to get the taste for good literature in ahead of the other.

A list of writers particularly adapted for girls must necessarily vary considerably according to the ideas of the one who gives it, but it has been my aim to recommend standard authors of known excellence, and I have personally read at least a few books of every author named.

First on the list I shall place Louisa M. Alcott's books. They are standard and just as good and as applicable to girls to-day as they were when fresh from the hand of the author thirty years ago. They are charming, every one of them. No boy or girl should miss reading them.

Then the life of Miss Alcott should be also read. Edna D. Cheney has given us a good one.

Next I shall place Mary E. Wilkin, the popular and gifted portrayer of New England life of the present time. Miss Wilkin's stories are pure and bright and true to life. She charms while she instructs, for you may be sure that somewhere there are exactly such characters as she portrays, and that they do and say the very things she says they do.

Miss Muloch, too, should be read by our girls. What story can be more charming than John Halifax, as popular to-day as ever and found on every book counter at holiday time.

Mrs. A. D. T. Whitney portrays some beautiful girl characters in her books which will every one be found pure and good and healthful reading for the young, while the popular Pansy books are familiar to almost everybody. As literary productions the latter may not come quite up to the standard demanded by the critic, yet they will not fail to incite emulation of the good deeds of her heroines on the part of those who read them. Mrs. Alden's girls are good ones and the influence of her books is uplifting.

Among men writers, we will mention Thackeray and Dickens, as of those

whose works never get to be out of date. More modern writers of fiction which girls may read with advantage are Barry, McLaren, Robert Louis Stevenson, Marion Crawford, Antony Hope, Howells, and for a portrayer of southern life, Thomas Nelson Page.

We must have some history of course, and for this we may take any of the standard histories to be found in any library. Prescott, Macaulay, Irving are among standard historians, while the latter is not to be missed in his other work either.

The Bay View reading course will be found excellent for study along special lines and fits in well with other reading.

This is not by any means a complete list of authors who may be advantageously read by girls, yet it will do for a start. The world never had so many writers as now. Many of them are good and provide us with pure wholesome reading, while others may far better be left alone.

There is a certain pride in the ownership of books and to one who loves them nothing is treasured more. Books are often ill-used and become shabby long before they should. A bookmark-er should be used rather than to turn down a leaf, and a book should never be laid face downward when open.

Here are a few rules for opening and using a new book. They are given by a prominent publishing house, D. Appleton & Co.:

Hold the book with its back on a smooth or covered table; let the front board down, then the other, holding the leaves in one hand while you open a few leaves at the back, then a few at the front, and so go on, alternately opening back and front, gently pressing open the sections till you reach the center of the volume. Do this two or three times, and you will obtain the best results. Open the volume violently or carelessly in any one place, and you will likely break the back and cause a start in the leaves. Never force the back; if it does not yield to gentle opening, rely upon it that the back is too tightly or strongly lined.

SOME CHRISTMAS SUGGESTIONS.

I have begun already to make things for Christmas. I made two little heart pincushions in this way:

I cut for each two pieces of cardboard, heart-shaped, covering each on one side with silk or cloth, then whip the two together over and over and stick pins in all around. Suspend with ribbon.

I have also made a hood for my sister—a Christmas present. It is made in this way: Crochet a chain of 108 stitches.

First row: In fourth stitch from end of chain* crochet three treble, two chain, one treble. (All these in the one stitch). This completes one shell. Then skip three stitches and repeat from *.

Second row: Crochet three chain and three treble in last treble, two chain and three treble in same, miss three treble and two chain and crochet three treble in next, (not the two chain), two chain, one treble, repeat to end of row. Repeat rows until the piece is wide enough from crown to forehead for the one who is to wear it.

The back piece is made the same, only it is but half as long. Sew the long piece around three sides of the other and finish with ribbons and a little crocheted edge around the face. Line with outing flannel. This is a nice hood for a little girl.

A Christmas present I saw today was a hairpin holder made in the form of a hat. One piece of cardboard cut round and another three inches wide and long enough to make a smaller circle for the crown of the hat. This was sewed in the middle of the first piece after covering both with pretty pink cloth. Crochet a cover to fit top of crown piece and cover where the hairpins are stuck in:

I think pincushions make pretty presents. I made one like this:

Cut nine two-inch squares of factory cloth for lining. Fold them and mark with a crease where the center of each side is. Cut nine three-inch squares of silk, put the corner of a piece of the lining upon the corner of one of the pieces of silk and sew together till the crease is reached, then commence on the next corner and sew to meet the first stitching. Fold the extra silk in a box pleat and stitch down. Do all four sides of each block in this way, slipping a little wad of wool between the lining and outside before closing the last side. With a few

stitches draw the silk firmly down in the center of each square. The nine squares make one cushion cover. I used different silk for each square.

Books make nice presents and aprons are always acceptable to those who have their own housework to do. Celluloid picture frames are also nice. Picture books delight the little tots and stories the older ones.

I enjoy Mrs. Grace's letters very much, also many others in the Household.

Benzle Co.

MISS EMILY EDSON.

A CHRISTMASY LETTER.

Will Aunt Em please come to the front and tell us about those overshoes for children? It is almost Christmas, and they will, no doubt, be nice for presents. How fast the time flies. It does not seem but a short time since we were preparing for last Christmas.

It will be a sad Christmas for me this year; some of our family circle are gone—moved away too far to spend Christmas in the old home. Our children married and settled near us, and on all festive occasions they meet in the old homestead, where they were born and brought up. But now there will be four vacant chairs, and it seems to me now that I cannot bear to have the rest come, unless the absent ones are here too. And while I am planning presents for the rest, I shall remember them, and send them something, although it is twelve hundred miles away.

Our editor wishes us to tell how to make something pretty for Christmas and what we are doing ourselves. I am not doing much fancy work—thought I would try some salt work. I think it is pretty and one can make so many different articles. I have a bed quilt pieced for one, a cushion and head rest of worsted pieced after the fan pattern, sixteen blocks for the cushion, a rug, pillow shams, and scarf and mittens for three little boys, and two picture scrap books for little ones—made of blue or pink cambric. I shall make some other little gifts, and buy some, but I think Christmas gifts made by ourselves are appreciated more than those we buy. Articles for home decoration and comfort are always acceptable, especially to those who have but little time for such work.

There are many inexpensive little trifles which can be made from scraps of silk, wool and other fabrics, which will carry with them good cheer. Needle books, pin balls, pen wipers, button bags, handkerchief cases, and work bags are all easily made by willing fingers.

A neat style of button bag is made of four pieces of pasteboard cut almost elliptical and of equal size. Cover each with velvet, plush or flannel, and line with satin or cambric. Then fasten the pieces together, leaving one side unsewed for the opening. A ribbon for hanging is attached from end to end, and by pressing on these two ends the box opens. Many other small articles might be made for some one to find out how good it is to give, even if you don't receive.

AUNTIE B.

MRS. GRACE'S CHRISTMAS HINTS

For the invalid or the aged one of the family who shivers at the very thought of winter, make a footstool of three-fourths of a yard of ingrain carpet or denim. Sew up one end and the side, stuffing it full with old rags or batting. It makes the warmest kind of a footstool and will stand any amount of kicks without injury.

A dressing sack makes a good gift. Make from pretty outing flannel. Cut square yoke and gather back and fronts on rather full. Buttons and button holes close the front. Finish with ruffle over the shoulders and around the neck.

A good footstool which is very convenient for the children to play with if nothing else is made of a yeast cake box which can be had at any grocer's. Cover with pieces cut from an old coat or pair of pants or from a cast-off dress. A little excelsior or wadding of some kind should be put under the top covering. Fancy stitches in colored yarn may be put in the top piece or it may be left plain.

A busy mother would be glad of some nice holders. From a pair of old overalls make a large thick ironing holder and several smaller washable ones from ticking or the tops of old socks. Prettier ones for the sitting-room stove are made of outing flannel tied with bright colored yarn. Sew a ring to each holder. Good ones for

this purpose may be taken from worn-out suspenders.

Cushions for chairs or couches are always acceptable. Very pretty and serviceable ones are made of five-cent calico.

A bunch of paper flowers brighten up a room nicely. Get a sheet of wadding, yellow or pink, and from it cut circles two or three inches in diameter. String six of these on a thread making a ball of them. Sew baby ribbon on, pink on yellow, and green ribbon on the pink. Put six balls in a bunch to hang over a picture frame.

The children's large handsome school cards can be very cheaply framed and will please them very much, especially if they are allowed to have a voice in the matter of selecting a place for the pictures to hang.

Now you wives, just look the other way a minute while I tell the good man what to get for you. If Tom, or Dick, or Harry, whatever his name may be, will get his wife a pair of felt-lined shoes he may save a big doctor bill. Don't get the cheap ones that are broad and homely, but a pair of two-dollar shoes that are well made and nicely finished. These will be a source of comfort all winter and your wife will put two heaping spoonfuls of sugar in your coffee and cook all manner of good things for you to eat all the rest of the winter.

MRS. GRACE.

Our thanks are hereby extended to those who have sent directions for knitted mittens. We have also received instructions for knitting twist stitch backs as well as shells. One of each will be printed.

RELIEF FROM PAIN.

Women Everywhere Express their Gratitude to Mrs. Pinkham.

Mrs. T. A. WALDEN, Gibson, Ga., writes:

"DEAR MRS. PINKHAM:—Before taking your medicine, life was a burden to me, I never saw a well day. At my monthly period I suffered untold misery, and a great deal of the time I was troubled with a severe pain in my side. Before finishing the first bottle of your Vegetable Compound I could tell it was doing me good. I continued its use, also used the Liver Pills and Sanative Wash, and have been greatly helped. I would like to have you use my letter for the benefit of others."

Mrs. FLORENCE A. WOLFE, 515 Mulberry St., Lancaster, Ohio, writes:

"DEAR MRS. PINKHAM:—For two years I was troubled with what the local physicians told me was inflammation of the womb. Every month I suffered terribly. I had taken enough medicine from the doctors to cure anyone, but obtained relief for a short time only. At last I concluded to write to you in regard to my case, and can say that by following your advice I am now perfectly well."

Mrs. W. R. BATES, Mansfield, La., writes:

"Before writing to you I suffered dreadfully from painful menstruation, leucorrhoea and sore feeling in the lower part of the bowels. Now my friends want to know what makes me look so well. I do not hesitate one minute in telling them what has brought about this great change. I cannot praise Lydia E. Pinkham's Vegetable Compound enough. It is the greatest remedy of the age."

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CHRISTMAS GIFTS FROM ANTRIM COUNTY.

Dear Editor and Sisters of The Household—I have long been an interested reader of The Household, and have obtained many useful hints from its columns. I have thought many times, as some interesting topics were being discussed, that I would write, but like most other farmers' wives have had plenty of other things to occupy my time.

But to-day as I read the editor's request for letters concerning Christmas gifts I resolved to write and tell you of a few things that I have found quite acceptable for presents. This year I am crocheting a rose tidy of clouded thread, pink and white. Any common tidy pattern is very pretty made of the colored thread, and it can be purchased very reasonably.

One year I made several picture throws of sheet wadding. One sheet will make two. Scallop the ends and work around the scallops with a button-hole stitch of silk. Paint a design of flowers at either end, and tie a bow of ribbon in the centre. I have one myself made of silkoline. It is much the same only the ends are hemmed and finished with tiny fancy balls. About one inch from the hem the threads are drawn and baby ribbon inserted in the opening.

Rugs are very acceptable presents for housewives, and one can seldom have too many. I have received two and prize them very highly.

I will now try and give directions for a star of tufted work that will make handsome cushion tops, headrests or rugs. For rugs take some heavy cloth, men's clothing is excellent, cut in blocks about eight inches square. Either get a tin star at the tin shop or cut one of pasteboard. Take three colors of Germantown yarn. Place the star in center of block and sew over and over it until each point has been entirely covered three times, once with each color. Then cut through the center of each point and take out the pattern. You will be surprised with the result if you have never tried it before. Crochet scallops of carpet warp for a border.

If this proves to be of any benefit to the sisters, I may come again. I wish to be known to the Householders as MINERVA.

SOME GOOD THOUGHTS FROM GRATIOT COUNTY.

In response to the call for Christmas suggestions, and as a small compensation for the many helpful words of our Household which I have received, I send the following ideas in regard to gifts:

Farmers' wives, and many in the city, have but little money, and we must make what we have go as far as possible. If it is only a dollar, by right management we can make ten or more persons happy; for if the gift is not so costly it will be appreciated as a token of love. A set of sauce dishes, a chopping knife, paring knife, kettle drainer, soup scoop, dipper, iron dishcloth, thimble, etc., are among the things most needed by the busy housewife. Handkerchiefs, socks, pocket-books, etc., make the gentlemen smile.

It isn't necessary to buy everything for presents. Among the children you can give pieces of calico for dolls' dresses and quilts, bits of lace and embroidery, a bag made of denim or other stout cloth for carrying school books, pin cushions, pen wipers, etc. If you have plenty of hickorynuts, walnuts, apples or popcorn, give them a half bushel, or whatever you can spare. You can in this way save work for yourself and make a whole family happy.

If you have a friend in town or country that must buy everything, give her a nice fat chicken, dressed or not, as you choose, some potatoes or apples, a can of boiled cider, or mince-meat, a roll of butter, or even a generous gallon of sweet or sour milk, or both. I have a friend living in town to whom I once took sweet milk, sour milk, and mince-meat. She said: "Thank you for all; but most for the sour milk; it is so hard to get in town."

If your house is all carpeted, give your friend the carpet rags that have accumulated during the year. If you haven't time to cut them, she will gladly receive them just as they are. In fact, give anything you have or can afford to get regardless of what your richer neighbors may say of you. MRS. R.

S. P.—The most beautiful black for your dress is the Magic dye black for wool. Try it.

DIRECTIONS FOR MAKING SHELL-STITCH MITTENS.

Put 21 stitches on each of three needles.

First row—K 1, o, k 1, o, k 1, o, k 1, o, k 1, purl 2. Repeat until you have knit once around.

Second row—Knit plain and purl two as before. The purl two comes between shells.

Third row—Slip 1, k 1, slip first over second, k 5, n, p 2. Repeat once around.

Fourth row—Slip 1, k 1, slip first over second, k 3, n, purl 2. Repeat once around.

You will now have 21 stitches on a needle. Repeat from beginning. Knit in this way as long as the wrist is desired, then knit the same on one needle for the back and the other two plain.

Dexter.

EDNA.

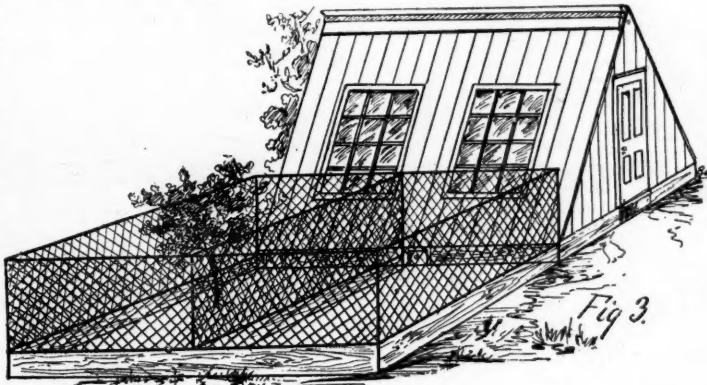
The Poultry Yard.

A CONTINUOUS POULTRY HOUSE.

(See Figs. 1 and 2 on first page.)

I have always liked this style of a house better than any other, and for cheapness and warmth together it cannot be equaled. It can be built at a cost of not over one dollar per running foot for the lumber, and any good handy poultryman can build it.

The house has a 4-foot hallway (A, Fig. 1) the entire length, and a door leading outside at each end (E). The ventilator is located directly overhead and is controlled by small rods attached to each section; if they are made of glass, like a transom above a house door, they will assist in giving more light, although it is not necessary.



The lower edge of ventilator (F) is hinged to roof, as shown more clearly in Fig. 2, the top resting against a strip running lengthwise of the house. The stick for opening and closing them should have a little screw-eye in the end, to fasten on a hook on the opposite side of the hallway from the ventilator, and high enough to give room for walking through.

The roosts and nests are all on the C side of the house. The side marked B is for scratching and chicken workshop, and in these runs there should be a plentiful supply of dry litter in which to scatter the grain food.

When choosing a site for the house there should be room for yards from both sides and a southern exposure for the glass side. The foundation should be plowed over twice, each time throwing the dirt to the center, so that the inside will be at least a foot higher than the outside; then harrow and roll it down smooth. The lower board, as shown in Fig. 2, should be set down in the earth six inches, all over the house, and on the outside about a foot. The floor is of earth, except the hallway, this is high enough to allow the fowls to walk under, as shown in D and D, Figs. 1 and 2. A sliding door is made on the C side, leading under the hallway floor, so that the fowls can be shut in either side, for cleaning or other convenience.

The interior arrangement is shown in Fig. 2. The roosts, nests, feed trough, water, grit and supply boxes are on the C side, and the dust box, cabbage, sheaf oats and whatever you see fit to hang up, on the B, or scratching side.

The hot-bed sash, L, is fastened on the outside by small bolts, the sash being bedded in fresh coal tar and tarred paper. A cloth curtain strung on three wires can be drawn across the inside to keep the hot sun out in summer. There and doors (M) on both sides, leading to

each pen. To hang these doors I use a screw-eye in the door and an L-shaped screw hook to hang the door on; then it can be easily taken off and set one side, out of the way, when cleaning.

The nests (H) should be made on the dark, or to "prevent egg-eating" plan, and be made removable so as to be easily and thoroughly cleaned. For all the partitions I should use wire netting, but lath can be used with a couple of fine wires at the top.

By this plan you will see that the fowls have all of the floor space, the hall floor being elevated to the top of partition boards, and by setting the feed and drinking vessels close, most of the work can be done from the hallway. The entrance at each end is graded off so that a wheelbarrow or small hand cart can be wheeled through, the doors being as wide as the hall—four feet.

The exterior design is shown in Fig. 3, together with the yards. It is quite a job to make a good, tight roof without using roofing paper. I succeeded, however, by using good, dry lumber, tarring the edges of the boards and laying tight, then tarring the whole roof over; after this was thoroughly dry, tar the under side of a four-inch batten and nail over each crack while the tar is fresh, then tar the whole roof over again.

Plug the knot holes up with a fresh tarred plug, smooth and well tarred on top. The best kind of tar is the solid asphaltum, which is applied hot. Whenever a leak shows give it a dose of tar, and if a patch is necessary put it on the same as the battens.

By this plan of yarding there will be two yards to each pen, one on each side of the house. By using these yards alternately the grass can be kept growing in them all the time. I should like to impress two things upon poultry raisers which are absolutely necessary to successful poultry raising—lots of

shade and lots of grass. For shade, I would recommend plum trees first; in an emergency, very early sunflowers. Start them in the house and when first planted protect them with guards. Plant them in groups. For the grass, sow white clover, and as an emergency grow rye or oats. All kinds of clover are good; the main object is to keep the yards green; the chickens will eat any kind of tender grass and by watching and changing from one to the other at the proper time, they can be kept very nice.

In regard to size of house, I would use 16 to 18-foot boards for the roof, and make the roof square pitch, which would make the house about twenty feet wide. Make a pen to every sixteen feet of house, which will accommodate twenty fowls easily. The yards would be sixteen feet wide and ninety-six feet long or longer.

Of course these houses can be built any size required, but one rule should be adhered to—that is, to have the hallway high enough to walk upright in. When letting the fowls into the yards it is a good plan to let one pen on one side and the next on the other, and so on, until all are out. In this way they cannot fight and are less liable to try to get out of the yards. In very cold climates, where it is necessary to have a very warm house, use a good heavy roofing paper, well painted, but be sure to tar the roof anyway. The battens will have to be left off and in some cases a few put on over the roofing paper.

One of the best papers I ever used is called the "Neponset"; it is a red rope paper, comes in three thicknesses, can



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E. E. PAGE.

EXPLANATIONS OF CUTS.

Fig. 1.—Interior view of continuous house. A, passageway 4 ft. wide. B, scratching and feed runs. C, roosting and nest room. D, passageway under floor. E, outside door. F, ventilator. G, sliding doors to yards.

Fig. 2.—Sectional view of interior. A, hallway. B, scratching pen. C, roosts and nests. F, ventilator. H, nest-box. I, roosts. J, dust-box. K, feed trough and water. L, glass. M, hall door.

Fig. 3.—Outside view of house, showing plan of yards.

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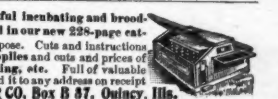
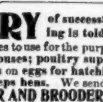
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Legal Department.

CONDUCTED BY EARL D. BAST, Jr.
to 11 Bank Chambers, No. 80 Griswold St.,
Detroit, Mich.

D. G., Cross Village, Mich.—We are unwilling to give an opinion as to the validity of title held by school district without an examination of abstract and records.

Undated note due on demand.—E. B., Manistee Co., Mich.—If A gives a note to B and there is no date given when it shall be paid, can it be collected? If so, when?—The note is due on demand.

Land acquired through tax title.—Subscriber, Sand Lake, Mich.—Whether or not a particular tax title is good can only be ascertained after a careful examination of the legality of all the steps leading up to its acquisition. We cannot venture an opinion on the one concerning which you write.

Tuition of non-resident pupils.—Straw part of the crop.—J. H. B., Jackson, Mich.—1. Our answer to M. P., Decatur, answers your question as to tuition of non-resident pupils. 2. Straw is a part of the crop, and under a cropping agreement should be divided in the same proportion as the grain.

Descent and distribution of property.—S. L., Montague, Mich.—Mrs. C was married to Mr. A, Mrs. C owning real estate at the time of their marriage, and some personal property. After their marriage the wife bought some unimproved land which Mr. A improved. The wife died, leaving a daughter by her first husband. How will her property be divided?—The fact that Mr. A improved the land purchased by his wife is of no importance unless there was an agreement securing reimbursement to Mr. A. All the real estate will descend to the daughter, and the personal property goes to the daughter and Mr. A in equal shares.

Tuition of non-resident pupils.—M. P., Decatur, Mich.—If a man owns a house in town, all furnished, but does not live in town, but pays taxes there and insurance, is he compelled to pay tuition for his children, who live in town most of the time?—The domicile or residence of the minor is that of his parents. Residence is the locality in which a person resides for the time being. The statute secures equal school privileges to all "residents," hence we are of the opinion that you must pay tuition, which must not be more than 15 per cent above the average cost per capita for the number of pupils of school age. Furthermore, the amount of such school tax shall be credited on their tuition, and you can be compelled to pay tuition for the difference only.

The Markets.

WHEAT.

The week closes with the market not as favorable for sellers as a week ago. Statistically the position of wheat is becoming stronger. The increase in the visible supply is very light considering the large amount being marketed in the northwest. The demand for home consumption and shipment abroad has taken nearly all the receipts. These will begin to drop off now that winter has really set in, and it would not surprise us to see the visible remain nearly stationary for the next few months. The report that vessels are loading with wheat at eastern ports for shipment to Russia would seem to indicate a deficiency in some portions of our greatest competitor in European and British markets. That is a significant fact when taken in connection with the large foreign demand. It looks as if the United States and Canada would have to supply about all the wheat needed by Great Britain during the winter months. At present there is no support to the market from speculators. It is only held up by the demand for the spot grain. Liverpool declined Thursday, and so did Paris.

The following table exhibits the daily closing sales of spot wheat in the Detroit market from November 15 to December 7, inclusive:

	No. 2	No. 1	Mixed	Red	White
Nov. 15.....	70 1/4	70 1/4	69 1/2	70	70 1/4
" 16.....	70 1/4	70 1/4	70	70 1/4	70 1/4
" 17.....	70 1/4	71	70	70 1/4	70 1/4
" 18.....	70 1/4	71	70	70	70 1/4
" 19.....	70 1/4	71	70	70 1/4	70 1/4
" 21.....	71 1/4	71 1/4	70 1/4	70 1/4	70 1/4
" 22.....	71 1/4	72	71	71	71
" 23.....	71	71 1/4	70 1/4	70 1/4	70 1/4
" 24.....	70 1/4	70 1/4	70 1/4	70 1/4	70 1/4
" 25.....	69 1/2	69 1/2	69	69	69 1/2
" 26.....	69 1/2	69 1/2	69 1/2	69 1/2	69 1/2
" 27.....	69 1/2	69 1/2	69 1/2	69 1/2	69 1/2
" 28.....	69 1/2	69 1/2	69 1/2	69 1/2	69 1/2
" 29.....	69 1/2	69 1/2	69 1/2	69 1/2	69 1/2
" 30.....	69 1/2	69 1/2	69 1/2	69 1/2	69 1/2
Dec. 1.....	70 1/4	70 1/4	69 1/2	69 1/2	69 1/2
" 2.....	69 1/2	69 1/2	69 1/2	69 1/2	69 1/2
" 3.....	69 1/2	69 1/2	69 1/2	69 1/2	69 1/2

" 5..... 69 1/2 69 1/2 69 1/2 69 1/2
" 6..... 69 1/2 69 1/2 69 1/2 69 1/2
" 7..... 69 1/2 69 1/2 69 1/2 69 1/2
" 8..... 69 1/2 69 1/2 69 1/2 69 1/2

The following is the record of the closing prices on the various deals in futures each day during the week:

	Dec.	May
Friday.....	69 1/2	69 1/2
Saturday.....	69 1/2	69 1/2
Monday.....	69 1/2	69 1/2
Tuesday.....	69 1/2	69 1/2
Wednesday.....	69 1/2	69 1/2
Thursday.....	69 1/2	69 1/2

The visible supply showed an increase of 729,000 bu. the past week, much less than expected.

The Ohio state crop bulletin for December 1 shows that the conditions of growing wheat crop in Ohio has fallen off 2 points since November 1, due to the ravages of the fly and the grub worm. Still its condition is 100 per cent of a full average. The acreage shows an increase of 4 per cent over last year.

Russian shipments last week were 1,472,000 bu., against 992,000 bu. the previous week and 2,736,000 last year. Danubian shipments were 456,000 bu. These are certainly small wheat shipments in view of the enormous crops Russia is said to have raised.

Broomhall says the arrivals of breadstuffs in the United Kingdom last week were about 2,800,000 bu., compared with 4,000,000 bu. a year ago. Broomhall expects an increase in the amount on passage next Monday. Quantity of wheat stocks in chief Russian ports November 13 (official), 14,066,000 bu., compared with 12,560,000 bu. November 13, 1897.

Argentine crop prospects are very good, and reports of the Russian crop are favorable.

The agent of an exporting house, writing from London on the grain situation, says: "On America, and America alone, we shall have to depend for the bulk of our supplies for some time to come."

Bradstreet's says of wheat prospects: A heavy increase in acreage is reported this fall, and the growing crop prospects are about all that could be desired. American farmers have so far done quite well in view of the conceded heavy yield this year, and the temptation to go still more heavily in wheat is a strong one. That this can be overdone was proved by the prices paid in the years 1893 to 1896, though it is to be remembered that there does not at present seem any likelihood of an immediate recurrence of the depression in trade which characterized those years and which unquestionably exercised a distinctly unfavorable effect upon values of wheat as well as other products of agriculture.

Broomhall's correspondent at Buenos Ayres, writing under date of October 28, says: From what we have been able to gather everything is going on satisfactorily in the wheat districts. On the western Santa Fe line the manager tells me that the crops are very good; on the Santa Fe & Cordoba line the wheat has suffered in some parts, but taking it all round the outlook is not bad. Making a rough estimate, by taking into account area under cultivation, etc., and supposing that everything will go on satisfactorily as at the present time, there will be, I think, about 1,000,000 tons for export—certainly not more.

The British steamer Flinsburg has been chartered to load a cargo of grain at Philadelphia, or New York, for Revel, Russia, making the second cargo to that country this season. From this statement it would appear that reports of crop failure in parts of the Russian empire are well founded.

India is reported to be suffering from drought; her next crop will be from a reduced acreage, and cannot therefore be large.

An authority writing upon the situation in the northwest, says: While no one questions that there is wheat enough in the northwest to meet all requirements of the local consumption, it is evident that the demand for shipment is sufficient to move the remainder. There is no probability, therefore, that any considerable amount of wheat will be held over to a new crop, excepting such as may be carried on farms.

DAIRY PRODUCTS.

BUTTER.

The market has weakened under the increased receipts, and while no change has been made in quotations, it requires better quality to bring the top price in either dairy or creamery. This condition is also apparent at the east, where the situation has compelled a reduction in prices. Quotations in this market are as follows: Creamery, 20¢; fancy dairy, 18¢; fair to good, 13¢; low grades, 9¢. At Chicago the market holds about steady, but the firmness noticed some weeks ago has disappeared under a steady increase in the receipts. Quotations in that market are as follows: Creameries, extras, 20¢; firsts, 17¢; seconds, 14¢. Dairies, extras, 18¢; firsts, 15¢; seconds, 12¢. Ladies, extras, 12¢; packing stock, 11¢. Roll, 12¢. The New York market has weakened under a steady accumulation of stocks, and values there are unsettled and lower. Receipts are large, winter dairies being all at work now, and with fresh cows the output is very large for the season. Values have declined 1¢ since a week ago. Quotations in that market are as follows: Creamery, Western, extras, per lb, 20¢; do firsts, 18¢; do thirds to seconds, 14¢; do state, finest, 11¢; do firsts, 17¢; do thirds to seconds, 14¢; Western, June, extras, 19¢; do firsts, 17¢; do seconds, 15¢; State dairy, half-firm tubs, full made, finest, 18¢; do firsts, 16¢; do thirds to seconds, 13¢; State dairy, firkins, fancy, 17¢; do second to firsts, 14¢; Western imitation creamery, finest, 16¢; do firsts, 14¢; do seconds, 13¢; factory, June, extras, 14¢; do second to firsts, 13¢; factory, fresh, finest, 14¢; do second, 13¢; do lower grades, 12¢; rolls, fresh, fancy, 15¢; do common to good, 12¢. At Elgin on Monday 424 tubs were offered, more than usual, and sales were made at 21¢, as against 22¢ the previous week, and 22¢ one year ago. Market closed steady.

CHEESE.

No change in cheese has occurred in this market since a week ago. The general outlook favors firmness and higher values.

The best full creams are selling at 11¢ per lb, and second grades at 10¢. Stocks are not large in any of the cheese-making states, nor are large amounts in distributing markets, such as Chicago and New York. We look therefore for a firm market to prevail with an upward tendency in values. At Chicago the market is again higher, and firm at the advance. The demand is fairly active, and the situation favors holders. Quotations are as follows: Young Americas, 10¢; twins, 8¢; cheddars, 8¢; Swiss, 8¢; Limburger, 5¢; brick, 6¢. The New York market shows increased strength. Supplies of full cream cheese continue quite moderate, and demand restricted in consequence. The feeling is very firm, with market gradually gaining strength on desirable grades. Finest September and October large cheese is more easily sold than bought at 10¢, while few strictly fancy small sizes are obtainable below 10¢. November-made cheese shows the usual late-made defects, and generally offering at 9¢ for large sizes and 8¢ for small. Skims held quite firmly for desirable grades. Quotations in that market are as follows: State, full cream, September and October, large, colored, fancy, 10¢; do white, fancy, 10¢; do colored or white, November, choice, 9¢; do good to prime, 9¢; do common to fair, 7¢; do September and October, small, colored, fancy, 10¢; do November, good to choice, 9¢; do common to fair, 7¢; light skims, small, choice, 7¢; do large, choice, 7¢; part skims, small, choice, 6¢; do large, choice, 6¢; do good to prime, 5¢; do common to fair, 3¢; full skims, 3¢.

At Liverpool the market for American cheese is firm and higher. Quotations are 48s. per cwt. for colored, and 47s. for white, as compared with 45s. 6d. for colored and 44s. 6d. for white last week. The advance is likely to start prices upward on this side of the Atlantic.

DETROIT PRODUCE MARKET.

Detroit, December 8, 1898.

FLOUR.—Quotations on jobbers' lots in barrels are as follows:

Straights.....	\$3.50
Clear.....	3.25
Patent Michigan.....	4.00
Low Grade.....	3.00
Rye.....	3.25

CORN.—The visible in the United States and Canada decreased 1,844,000 bu. the past week, and is now 20,369,000 bu. No. 2 quoted at 34¢; No. 3, 34¢; new No. 3, 32¢; No. 2 yellow, 36¢; No. 3 yellow, 35¢; new No. 3 yellow, 33¢; new No. 4, 32¢ per bu. Market quiet.

OATS.—The visible supply of this grain decreased 40,000 bu., and is now 5,546,000 bu. No. 2 white, 29¢; No. 3 white, 28¢ per bu. In the face of weakness in other grains oats hold quite firm.

RYE.—The visible supply of this grain decreased 117,000 bu. the past week, and is now 1,022,000 bu. No. 2 quoted at 55¢ per bu., with sales of samples as low as 52¢.

BARLEY.—The visible supply of this grain decreased 60,000 bu. the past week, and is now 3,338,000 bu. Market firm and higher at \$1 per cwt. for good samples.

CLOVER SEED.—Prime spot selling at \$4.50 per bu. for red, and \$4.00 for March; No. 2, \$3.25 per bu. Alsike quoted at \$4.40 per bu. for good samples.

BEANS.—Market weaker. Spot quoted at \$1.05; December, \$1.07; January, \$1.07 per bu.

FEED.—Bran, \$12.00; coarse middlings, \$13.00; fine middlings, \$14.00; cracked corn, \$15.00; coarse cornmeal, \$14.00; corn and oat chop, \$13.00 per ton in jobbing lots.

POTATOES.—The market is slightly improved in tone, and choice stock is higher. Dealers' quotations are 30¢ per bu. On the city market farmers are selling at the same prices, but 35¢ is most often paid. At Chicago the range of prices is 27¢ to 34¢ per bu, which is slightly higher than a week ago. At Cleveland fancy in small lots are quoted at 35¢ to 40¢, and choice at 30¢ to 33¢; in car lots the range for fair to fancy stock is 28¢ to 33¢ per bu.

DRESSED HOGS.—Selling at \$3.75 to \$4.00 per hundred. The cold weather is helping the trade, but prices are very low.

CELERY.—Selling at 20¢ to 25¢ per dozen.

ONIONS.—Selling at 35¢ to 40¢ per bu on market, and 30¢ to 35¢ per 100 in large lots. At P.sburg quotations are 25¢ per bu for red, and 35¢ to 40¢ for prime yellow.

CABBAGE.—Quoted at \$3.25 to \$3.50 per ton in large lots, and \$2.25 per 100 on the city market.

APPLES.—Snow, \$3.50 per bbl; best winter fruit, \$2.75 per bbl.

DRIED APPLES.—Evaporated, 7¢; dried, 3¢ to 4¢ per lb.

LIVE POULTRY.—Quoted as follows: Spring chickens, 6¢; fowls, 6¢; ducks, 6¢; geese, 8¢; turkeys, 7¢. Dressed poultry 1¢ above these prices. At Chicago quotations on dressed are as follows: Turkeys, 8¢ to 10¢; chickens, 6¢ to 6¢; ducks, 6¢ to 7¢; geese, 6¢ to 7¢ per lb.

EGGS.—Fresh candied, 20¢ per doz; cold storage, 16¢ per doz. Market very firm. Small lots from wagons sell at 21¢ to 22¢. Market firm.

BALED HAY AND STRAW.—Best timothy, in car lots, \$8 per ton; rye straw, \$5; wheat and oat straw, \$4.00.

WOOL.—Nominal quotations in interior markets are as follows: Unwashed fine, 14¢ to 15¢; washed fine, 19¢ to 20¢; unwashed medium, 18¢ to 20¢; washed medium, 22¢ to 25¢ per lb.

HIDES.—No change in the range of prices. Quoted as follows: No 1 green, 7¢; No 2 green, 6¢; No 1 cured, 9¢; No 2 cured, 8¢; No 1 green calf, 10¢; No 2 green calf, 8¢; No 1 kip, 7¢; No 2 kip, 8¢; sheepskins as to wool, 40¢ to 70¢; shearings, 10¢ to 15¢.

PROVISIONS.—No changes have occurred since our last report. Market rather weak. Quotations are as follows: Mess pork, \$7.75 per bbl; short cut mess, \$11.75; short clear, \$11 to \$15; compound lard, 4¢ to 5¢; family lard, 4¢; kettle lard, 6¢; smoked hams, 8¢ to 9¢; bacon, 8¢ to 9¢; shoulders, 5¢; picnic hams, 5¢ per lb.

COFFEE.—Market steady and unchanged. Quotations are as follows: Roasted Rio, ordinary, 9¢; fair, 11¢; Santos, good, 14¢; choice, 18¢; Maracabo, 20¢ to 25¢; Java, 26¢ to 30¢; Mocha, 28¢ to 32¢; package coffee sold on the quality plan on a basis of \$3.50 to \$10.50, less 75¢ per 100-lb case in New York.

OILS.—White kerosene oil and turpentine are higher. No other changes. Quotations are as follows: Raw linseed, 35¢; boiled linseed, 36¢, less 1¢ for cash; extra lard oil, 50¢; No 1 lard oil, 35¢; water white kerosene, 9¢; fancy grade, 11¢; deodorized stove gasoline, 9¢; turpentine, 45¢ per gal in bbl lots.

HARDWARE.—No changes have occurred since a week ago. Quotations are as follows: Wire nails, \$1.50; steel cut nails, \$1.45 per cwt, new card; axes, single bit, bronze, \$5; double bit, bronze, \$5.50; single bit, solid steel, \$6; double bit, solid steel, \$9.50 per doz; bar iron, \$1.35; carriage bolts, 75 and 10 per cent off list; tire bolts, 75 per cent off list; painted barbed wire, \$1.65; galvanized, \$2 per cwt; single and double strength glass, 80 and 15 per cent off list; sheet iron, No 24, \$2.35 per cwt, galvanized, 75 and 10 per cent off list; No 9 annealed wire, \$1.45 rates.

DETROIT LIVE STOCK MARKET.

Michigan Central Stock Yards.

December 8, 1898.

CATTLE.

Receipts Thursday, 676, as compared with 299 one week ago. Market fairly active; good handy butchers steady, common thin butchers and stockers slow and weak. \$5.00 was top price to-day for a choice steer weighing 1,500 lbs, but the bulk changed hands at prices ranging from \$3.00 to \$3.70; fair to good butcher cows, \$2.75 to \$3.50; canners and common thin butchers, \$1.25 to \$2.65; bulls, good shippers, \$3.35 to 3.50; light to good butchers, \$2.75 to 3.25; stockers, \$3.00 to 3.60; feeders, \$3.55 to 4.00. Veal calves—receipts, \$1 active at \$5.50 to \$6.25, a few choice brought \$6.50. Milch cows and springers active at \$3.00 to \$4.50 each; good fresh young cows bring \$5.00 to \$10.00 per head more; very few here.

Bradford sold Caplis & Co 4 mixed butchers av 95¢ at \$2.90.

Weitzel sold same 4 do av 88¢ at \$3.50. Spicer & Merritt sold Frey 7 mixed butchers av 70¢ at \$3.45 and a steer to Gray weighing 550 at \$3.45.

Purdy sold Reed 6 stockers av 60¢ at \$3.50, 3 mixed butchers to Caplis & Co av 68¢ at \$3.10 and 5 do av 90¢ at \$3.50.

Coates sold Sullivan 3 mixed av 97¢ at \$2.50 and 11 do av 72¢ at \$3.12 1/2.

Loosemore sold Russell 5 mixed butchers av 94¢ at \$3.70 and 6 feeders to Sullivan av 86¢ at \$3.30.

Howe sold Sullivan 4 stockers av 64¢ at \$3.30.

Spicer & M sold Schleicher 7 mixed butchers av 80¢ at \$2.60 and 8 do av 60¢ at \$3.25.

Erwin sold Regan 5 mixed butchers av 55¢ at \$3.00, 12 steers to Sullivan av 62¢ at \$3.50, a bull weighing 1,650 at \$3.25 and 3 mixed butchers to Caplis & Co av 103¢ at \$3.20.

Carter & Fuller sold Marx 5 mixed butchers av 62¢ at \$3.25 and 22 do av 80¢ at \$3.60.

Weeks sold Sullivan 4 steers av 65¢ at \$3.40 and 4 heifers to Schleicher av 65¢ at \$3.35.

Ackley sold Sullivan 6 mixed av 75¢ at \$3.50.

Brooks sold Kamman 7 mixed butchers av 62¢ at \$3.00.

Bunnell sold Fitzpatrick 10 mixed butchers av 104¢ at \$3.12 1/2, a steer weighing 950 at \$4.00 and a bull to Sullivan weighing 1,800 at \$3.50.

Hawley sold Regan 2 mixed butchers av 74¢ at \$3.35.

Aldrich & H sold Hymas & B a bull weighing 1,800 at \$3.15, 7 cows to Mason & F av 80¢ at \$2.00 and 1 weighing 930 at \$3.50.

Lewis sold Sullivan 4 mixed av 95¢ at \$3.00, 7 steers av 103¢ at \$4.25 and 4 do av 78¢ at \$3.75.

Bunnell sold Houghton 2 steers av 65¢ at \$3.50.

Reagan sold Robinson 3 mixed butchers av 86¢ at \$3.00 and 2 canners to Mason & F av 73¢ at \$1.25.

Mayers sold Fitzpatrick 13 mixed butchers av 79¢ at \$3.25 and a canner weighing 1,130 at \$1.50.

Sweet & N sold Sullivan 31 mixed stockers av 60¢ at \$3.40.

Prucha sold Magee 13 mixed butchers av 76¢ at \$3.40 and 4 do av 72¢ at \$3.40.

Behlmer sold Fitzpatrick 3 mixed butchers av 80¢ at \$3.50 and a bull weighing 900 at \$3.00.

Dunn sold Caplis & Co 3 mixed butchers av 81¢ at \$3.60.

Brooks sold Fitzpatrick 4 cows av 92¢ at \$2.75 and 14 stockers to Farnum av 62¢ at \$3.40.

McLaren sold Mich Beef Co a steer weighing 1,550 av \$5.00.

Spicer & M sold Pritchard 7 feeders av 71¢ at \$3.60.

H H Howe sold Russell 2 heifers av 90¢ at \$3.75.

Kelsey sold Houghton 2 steers av 84¢ at \$3.80 and 2 cows to Mason & F av 1,150 at \$2.60.

SHEEP AND LAMBS.

Receipts Thursday, 897; one week ago, 1,092. Market active, and 10 to 15¢ higher for all but the very common. Range of prices: good to choice lambs, \$5.00 to \$5.25; light to good, \$4.40 to \$4.90; yearlings and good mixed lots, \$4.00 to \$4.75; fair to good butchers, \$3.00 to \$3.90; culls and common, \$2.00 to \$2.85.

Roe & Holmes sold Young 40 lambs av 76¢ at \$5.00.

Glenn sold Harger 35 lambs av 76¢ at \$5.00 and 8 sheep av 98¢ at \$3.00.

Ackley sold Monahan 20 culls av 68¢ at \$2.00.

Sharp sold same 10 sheep av 85¢ at \$2.75 and 34 sheep and lambs to Hiser av 71¢ at \$4.50.

Bergen & T sold Hiser 15 mixed av 80¢ at \$2.50.

Jas Heeney sold Fitzpatrick 51 lambs av 80¢ at \$5.00.

N T Sly sold Young 43 lambs av 80¢ at \$5.25.

Spicer & M sold Monaghan 59 mixed av 79¢ at \$2.90 and 53 do to Sullivan Beef Co av 80¢ at \$5.50.

Belmer sold Fitzpatrick 47 most lambs av 72¢ at \$4.90 and 24 mixed av 83¢ at \$2.30.

Kalahan sold same 32 lambs (bucks) av 90¢ at \$4.75.

Spicer & M sold Mich Beef Co 35 sheep and lambs av 80¢ at \$4.75 and 17 av 96¢ at \$3.50.

Hoover sold same 48 mixed av 74¢ at \$4.40.

Pinne sold Hiser 40 sheep and lambs av 80¢ at \$4.50.

Pinkney sold Monaghan 35 sheep and lambs av 72¢ at \$4.40.

Miscellaneous.

THE SILENT LAND.

Slowly fades the sunset flush
Above the ships at sea;
Gently through the twilight hush
The wind blows cool and free.
Now the world its care forgets,
All its passion and regrets;
All the griefs that dimmed the day
From its tired heart slip away.
One by one, alone and slow,
To the Silent Land we go.

Brightly gleams the signal-light
Across the drifting foam;
Noiselessly before the night
The white-winged birds flit home.
Down the dusky vale of sleep,
Through the shadows thronging deep,
From our waking joy or pain,
From the struggles fought in vain,
One by one, alone and slow,
To the Silent Land we go.

None may journey with us now;
No friend nor foe we take;
None shall question when or how
The hidden port we make.
None shall see the sights we see—
Sights of weirddest mystery;
None shall hear the sounds we hear—
Chiming music, faint but clear.
One by one, alone and slow,
To the Silent Land we go.

Darker grows the rugged shore;
The starlight glimmers cold;
Voices heard on earth no more
Are calling as of old.
Wizard faces, wild and gray—
Faces never seen by day—
Seem to lurk with grim delight
In the haunted halls of night.
One by one, alone and slow,
To the Silent Land we go.

Soon, full soon, we may awake
Beneath the radiant sky,
Soon, ah! soon, no sound may break
The dream in which we lie.
Quiet worlds of Sleep and Death!
But the passing of a breath,
But the beating of a heart,
Hold your shadowy realms apart.
One by one, alone and slow,
To those Silent Lands we go.

Dost thou tremble, timid soul?
The moonlight floods the sea;
The white waves murmur as they roll
A song of peace to thee.
The dawn will come, when night is o'er,
With twinkling feet along the shore.
To him who clasps his Father's hand
No terror holds the Silent Land,
Though one by one, alone and slow,
Into its mystic realms we go.
—Angelina W. Wray in Harper's Bazar.

THE LOVER'S QUEST.

BY ERNEST GLANVILLE.

Author of "The Lost Helmsman," "The Fossilker,"
"A Fair Colonist," "The Golden Rock," &c.

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(CONTINUED)

A dull sound, as of the sea breaking
afar, the sound of hundreds of bare
feet, steadily advancing.

"They come! Englishman, you take
two sides of the square. I will see to
the other." The Arab drew his sword,
and the bright blade flashed in the
dark to the reflection of the dying fire.

Louder grew the sound, accompanied
by a swishing noise, and a measured
rhythm, with a perceptible tremble in
the earth.

There was a complete silence in the
camp. No one so much as whispered,
each dark figure standing with head
bent, and heaving breast.

"Shout!" said the Arab to the induna,
who stood beside him. "Shout as if in
song, lest they take note of our silence."

The induna started his song, deep-
throated, and a man from the far end
took it up. They listened while they
sung, and after two or three sentences
their voices rolled away in a whisper,
and again there was complete silence.

"It matters not," said the chief,
"they will come now. Give the word
that no man must fire until the enemy
reach the first wire. Let them all fire
together. They will have time in the
confusion of the fall, as the front men
trip, to reload. Warn them well, not
a shot before they reach the outer wire."

The induna's deep voice rang out in
stern command as he gave the order,
and there was a rattle of metal all
round the square, as each man thrust
his rifle through the loophole.

"Fire low," cried the chief.

The order was repeated.

Louder rose the rolling thunder from
the advancing army, then was launched
a terrific shout that split the air,
and, following it, the war cry,

"Forward, my brothers, forward.
If we go forward we die.
If we turn back we die,
Let us go forward, my brothers."

"Steady, my children, stand fast, and
shoot straight," cried the chief, and
Miles ran to the spot opposite to where
Hans crouched in his pit outside the
wall.

CHAPTER XXIV.

Out of the darkness there broke a
sheet of fire-red tongues of flame, that
darted viciously and belched forth a
storm of bullets. From the north and
west the first attack came in a hissing
hail of lead. Then, after the second
volley, in a whirlwind of sound, of
yells and whistles, and drumming
shields, a rush was made from the
south. Out in the darkness there was
the gleam of white shields, the indis-
tinct waving of plumes, and tossing of
arms. On they came, in a long line,
then the foremost man saw the wall
looming up ahead, and whistled loud
through his teeth. The next instant he
went headlong, and the first line, with
a howl of anguish as their shields struck
the taut wire, followed suit.

"Fire!"
The wall was lighted up by the dis-
charge. The flash revealed a line of
struggling figures on the ground and,
behind, a wall of racing men crouching
low as they came.

Their ranks were torn by the fire—
and dismayed by the unknown obstacle
which had overtaken the first rank, and
by the sudden volley, the rest with-
drew.

In quick succession other masses
were hurled on the other side of the
square to be met and driven off in the
same way.

"Well done, my children," cried the
chief. "You have won the first trial,
but the struggle is not yet over."

The Angoni, excited, started their
song, in unison, stamping with their
bare feet, and sending forth a magnifi-
cent roll of warlike sound.

Out of the darkness came no re-
sponse for some time, then, from the
pile of rocks, there came a stinging
volley.

"Keep low, men," said the chief, then
reaching Miles he asked if it would not
be well to fire the charge.

"Not yet," said Miles; "when they at-
tack again."

"Pass up," came a low voice outside.
"They cut the wires."

Miles discharged his rifle, and at the
signal a steady fire was kept up. But
presently they heard the hum of a vi-
brating wire, showing that one strand
had been cut, then the hum of another,
and a sound of men running and tug-
ging.

"Stand firm," shouted Miles. "They
come again."

The deep bass of the indunas was
heard calling to their men, but the
sound was drowned in a wild, fierce
cry, as, with an impetuous rush, that
threatened to carry all before them, the
enemy came sweeping up. There were
no wires to check them this time. The
volley made them waver, but did not
stop them, and soon they were swarm-
ing round the walls. The Angoni
dropped their rifles and plied kerrie
and assegai, shouting with all the fury
of their assailants until a din arose as
of demons escaped.

The Arab, with a band of a dozen
men, raged from point to point where-
ever the enemy effected an entrance,
his sword gleaming like fire until
dulled with blood, and his own voice
rising above the horrible storm.

On the west flank the attack was
weakest, and the Angoni, on their own
account, drew away from there to run
where the fighting was fiercest.

The fighting now was in the enclo-
sure, and from the east and north the
defenders were being gradually pushed
back on the second line of defense
about the house. Within the inner wall
many wounded men had already gone.

Now there was little shouting, but a
noise of weapons clashing, of deep
breathing, of occasional rifle shots, of
the dull crushing blows of the kerries,
and the ring of assegais. And, in this
enforced lull, there rose a terrible yell
of triumph, as a dense mass of the
enemy rushed to the west wall and
came leaping in.

"Hans!" cried Miles, with the whole
strength of his voice, "Fire!" Then he
wheeled his men across to stem the
rush, and with clubbed gun struck
with fierce energy. His men had not
yet been so hard pushed, and they
stabbed furiously. The fight swayed
to and fro, the ground grew slippery
underfoot, but as fresh men came pour-
ing in the gallant band of defenders,
out-numbered five to one, were gradu-
ally borne back.

"Rally to the inner wall," came the
hoarse cry from the Arab.

The order was repeated by the in-
dunas, and some of the men quickly
obeyed.

"Fire!" cried Miles. "The mine!"
The chief heard, and with his body-
guard came raging through. It was

now a scene of inextricable confusion,
friends and enemies mixed, and so
close that they could not strike, the
pressure from the outside acting as a
constricting force.

Suddenly there was a blinding flash.
The earth heaved, and with a terrible
sound of rending, masses of rock were
hurled into the air. At the same time
from beyond there arose a wild cry
of terror.

"Strike and slay!" cried the chief;
"strike and slay!"

"Strike and slay!" thundered the in-
dunas, and amid a falling storm of
rock, the Angoni sprang once more at
their foes.

The Matabele, on the edge of the
mass of men, terror-stricken at the
sudden explosion, fled, and the rest
gave way. Miles struggled to the wall
shouting to Hans, but that veteran, ly-
ing low in the pit, with a stout plank
covering his body from the assegai
prods of passing Matabele, preferred to
stay where he was. In the enclosure,
the Angoni set about their work with
renewed fury, and the enemy, within
five minutes of the explosion, were in
full flight. When once a native starts
running in earnest he is past rallying.
The triumphant cries of the Angoni,
and the following bullets, added wings
to their flight, so that none were left
but the wounded, and they were killed
as they lay, before Miles knew what
was happening—not that his interven-
tion would have saved the life of one
man. The black man expects no quar-
ter, and he gives none. The wounded
took the death-stab in silence.

"Are these men all dead?" cried
Miles, wiping the damp from his brow,
and speaking scarcely above a whisper,
as his eyes ranged over dead forms dim-
ly outlined.

"Allah be praised!" cried the chief,
wiping his blood-stained sword.

Miles leant against the wall with
closed eyes, panting, while the warriors
raved about the place, screaming in a
wild fever of madness, and others
crouched around the water barrel.
Many writhing on the ground called
hoarsely to their friends for help.
There were no women to attend them,
and their comrades gave them no heed.

"Mein Gott, baas, the blood runs. Es
is dood?"

"Hans, is that you?"

"Ja, sieur. Allevareh! It is better
outside the wall."

"What is the matter," said Miles, lift-
ing his heavy lids.

"Old man, you fired the mine well,"
said the chief. "The gold is yours, but
this is no time for talking. Go, and out
if the Kafirs retreat."

"But they run!"

"Go, old man. Englishman, my
friend, you fought like ten. Go and
drink. Then let us see to the cleansing
of the yard. There is no pleasure in
the sight of a dead man."

The Arab in a few minutes obtained
a mastery over the band, had them
marshalled in a line, and, after prais-
ing them, set one half to remove the
bodies while the others carried the
wounded to the shed, and set about
cleansing the yard.

The men went to their work chant-
ing, and when the sun arose the enclo-
sure had regained its trim look, but the
signs of the fierce struggle were visible
enough. There was scarcely a man who
had not a wound of some kind. In the
shed were forty-five wounded, and out-
side, where a trench was being dug,
were a hundred and thirty Matabele,
and twenty-three dead Angoni.

Hans came in at daybreak with the
report that the enemy had fled to the
thorns in a state of depression. He had
gathered that the war doctor and his
fellow medicine men had taken up a po-
sition in the pile of rocks, and had per-
ished in the explosion, a disaster which
the Matabele attributed to some evil in-
fluence, and the rumor of which, quick-
ly circulated in the thick of the fight,
had done more than anything to dis-
hearten them and snatch victory away
just when it was within their grasp.
The attack had been planned and car-
ried out by a chief.

"How did you find this out?" asked
the chief.

"There was a man crawling, with his
leg broken below the knee, and him I
questioned."

"And what return did you make
him?"

"I am not a wolf. I gave him snuff
and stopped the wound with earth, so

that the blood flowed not. For this he
told me more; namely this, if the at-
tack failed, Stoffel himself would take
command."

"Ah!"
"Ja; Stoffel has a plan. The indunas
would not hearken to him, and he let
them go."

"How many men are there?"

"Two regiments fought last night."

"I saw as much from the shields."

"And another is coming. The man
said they would have eaten the Angoni
but for two things, the wire that
caught their legs and the lightning that
struck the ground where the medicine-
men stood."

"When will Stoffel carry out his
plan?"

"The man knew not, but he said
there was news that the thing must be
done soon, as the impi was wanted
elsewhere."

"And I have lost nearly a half of my
force. Well, little man, you have done
well. The gold I promised is yours.
Your master can keep it for you."

An induna came up singing, and be-
hind him nine men, each carrying a
shield. They saluted the chief, as they
laid each man his shield at the Arab's
feet, while the induna, with his assegai
uplifted, and the blood still oozing from
a dozen wounds, sang:

"What is this?"

"These are shields of the men who
were slain by the knife. The Great
One flashed his burning brand, and
they fell. Behold the lion—the lion with
the black mane! Nine have fallen to his
arm, to the hooked claw. Ho, chief, I,
Magana, the buffalo, salute thee.
Seven have I slain in the fight, with
my spear."

The warriors took up the cry and
chanted the words, stamping with their
feet.

The Arab looked at the trophies of
his valor with flashing eyes, and a
vision maybe of triumph yet to come
against another foe.

"So, Magana. You have fought well,
and you I will make captain of a re-
giment hereafter. But why speak of
what one man has done since each has
done so well. For a sign of this day
let each warrior let into his shield a
strip of red, and when the armies are
all assembled for the great fight here-
after, each one who comes to me with
a shield so marked shall be a leader
of men with due reward. The booty
that is here shall be shared among you
when it is safely carried to the river.
See well that you guard it. Keep sharp
your spears, for danger is not past.
Watch, lest the enemy surprise you.
The white man whose plan it was to
build the little fence that tripped the
(Continued on page 453.)

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enemy will stay with us. His word here will be as my word."

"Hail to the Wagna—the great white ox, who trampled the foe, who is cunning and as far-seeing as the eagle, who, like the lightning bird, strikes down his enemy afar."

"My word, baas, this is a man. They were afraid to praise you, so he gave them the word, and there is no malice in him. He is a great leader."

"My friend," said the Arab, suddenly coming to where Miles stood apart, sore from his wounds, "this victory is yours."

"No, chief. It is a soldier's victory." "And it would have been a soldier's burial, too, but for your thought. While we fight together you are chief with me. I have told them so. Now let us eat and rest."

They sought the house, and the chief, from the stores, sent out double rations, with a huge roll of twist tobacco.

"By Allah!" he cried, as he took his seat. "I have spoken great words to the men, but I doubt if one of us ever reaches the river. With five hundred blacks I would give them battle, with a hundred such as you I would fight a way to the river."

"Yet they fought magnificently."

"Ay, there are men among them who would fight while they had strength to stand, but they would be hard to hold in a retreat, with the enemy always striking. They would break up, or turn to seek death."

"Is there much booty here?"

"There is a good store of guns and powder."

"If we retreated and left the booty would not the enemy be glad to be quit of us?"

"My friend, my life is more to Stoffel than all the booty in the land. It is my life or his; and he has not schemed for wealth to pass his days in terror of my vengeance. If we left we would be followed and overwhelmed."

"What then?"

"I spoke to you of a plan. What I think is this. Stoffel will withdraw his men in the hope that we will think the way open and retire. But he will have his force ready to strike as we go over the veldt. We must find out what his movements are, and attack him in the night. We will strike and retire. They would never follow us in the dark. If his force is divided we will have two parties out, and strike them both. This will force him to give battle again. It will break up that plan of his, the thought of which gives me uneasiness. He will assemble all his men, and when he marches out of his zereba, we will leave here."

"To retreat?"

"No, my friend, to seize his camp. There are great stores there, and we will be no worse off than here. Such a stroke would dishearten his men. What do you say?"

"It is a daring scheme, chief. Suppose he leaves a strong body in charge, we would be caught between two fires."

"Why should he? He will think his camp safe, and will take forth all his forces to crush us. It seems to me a good scheme."

"You will stake everything on one blow."

"That is the saving of it. Every man will fight with the strength of ten to seize the zereba, and there is moreover prospect of booty. Stoffel will not guard against such a plan. It is so simple he would not think of it. Come, say, can the thing be done?"

"It can be done if nothing goes wrong. If you have reliable information of his movements, if you can compel him to withdraw all his men to fight, if he does it in the night—then, it can be done."

"Then it must be done. There are four men I can depend on—yourself, the old man, Magana, and myself. We will strike at them this very night, and tomorrow, by Allah! it will be done. The thought of it stirs my blood. It is better to outmatch the enemy's leaders than to kill his men. This morning we will make a map of the land. It is settled. Now you would like to hear of the girl. The noise of the fighting would have roused the dead, and she must be eager to see you."

He clapped his hand and the dark girl came to the door. He gave her an order and left the room.

(To be continued.)

Union Ticket Office, Michigan Central and Lake Shore, Move.

The Union Ticket office will be moved from the corner of Woodward and Jefferson Aves. about Dec. 10th to its excellent new quarters in the Detroit Opera House Block.

THE LATEST STORIES.

Mrs. Brown (who has borrowed butter from her neighbor)—"Do you know, Jane, I half believe this is the same butter we paid the Greenes with day before yesterday."

Jane—"It does taste mighty like it. Terrible stuff!"

Mrs. Brown—"To think that the Greenes would pass such butter as that on a neighbor! I'm sure it's the same."—Boston Transcript.

The Sultan of Muscat for some weeks past has been making a tour of his possessions. He determined to appropriate the house of a widow and lodge a guard in it. He therefore gave the widow notice to vacate her house and hand it over to his men, but the widow was made of sterner stuff, and absolutely refused to move for the Sultan or his army. The woman, moreover, hired ten men and armed them with Martinis, and then defied the Sultan to combat, which was declined, and the widow still holds possession.—Pinang Gazette.

In a New England graveyard there has lately been discovered an epitaph which leaves a wider scope for the imagination of the reader than almost any other which could be composed. A person straying through the little graveyard stooped to read the words on an old slate-stone slab; two winged heads were carved above the epitaph: Here lies the remains of Mary Ann Pratt; Words are wanting to say what. Think what a good woman should be; She was that.

"Why, what are you talking about?" snapped the telegraph to the telephone. "You don't compare with me. I'm the ticket!" "Oh, but you're so old-fashioned," replied the telephone. "Look at my connections. I'm received in some of the best families." And the telegraph simply dashed off in a rage and left the telephone to answer a call from one of the leading bells.

Of William and John Scott, afterward Lord Stowell and Lord Elton, Lord John Russell used to tell this story: When they were young men at the bar, having had a stroke of professional luck, they determined to celebrate the occasion by having a dinner

at the tavern and going to the play. When it was time to call for the reckoning William Scott dropped a guinea. He and his brother searched for it in vain and came to the conclusion that it had fallen between the boards of the uncarpeted floor.

"This is a bad job," said William, "we must give up the play."

"Stop a bit," said John. "I know a trick worth two of that," and he called a waitress.

"Betty," said he, "we've dropped 2 guineas. See if you can find them. Betty went down on her hands and knees and found the guinea, which had rolled under the fender.

"That's a very good girl, Betty," said John Scott, pocketing the coin.

"Saw a man undertake to eat four pounds of sponge cake on a wager."

"Did he succeed?"

"No. When he had eaten about half of it he was compelled to throw up the sponge."

Latest from Ireland.—He was a Limerick man, and he was summoned at the Petty Sessions for the non-payment of the rent of his cottage. Said he, "Yer Worship, sixpence a week is too much rint entirely for the little cabin. Come down, your honor, off of the binch there, an' go in yourself, an' if an ass can turn in it, I'll be contint to pay the full sixpence a week."

It was a case of assault by a husband on a wife, and the solicitor for the complainant said to her, "And now, Mrs. Sullivan, will you be kind enough to tell the court whether your husband was in the habit of striking you with impunity?" "With what, sor?" "With impunity!" "Faix, he was, sor, now an' thin," said the witness, "but he struck me oftener wid his fist."

A man was indicted at the Cork Quarter Sessions for stealing ducks from a farm. The farmer swore he should know his fowls anywhere, as they had certain peculiarities, which he went on to describe. "Why," said the solicitor for the prisoner, "they can't be so very rare. I have some like them in my own yard." "Faix, that might aasily happen," said the farmer, "I've had some of thim stolen before this time."

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Grange Department.

Our Motto:—"The farmer is of more consequence than the farm, and should be first improved."

Address all correspondence for this department to
KENTON L. BUTTERFIELD,
AGRICULTURAL COLLEGE, - MICH.
News from Michigan Granges is especially solicited.

GRANGE CALENDAR.

Huron Co. Pomona, with Verona Mills Grange, December 22.

SUCCESSFUL GRANGE WORK.

We publish in this issue a map of Lenawee county, Michigan, showing the location of the twenty-seven active Granges in the county (the twenty-eighth Grange has been organized since the map was made). Accompanying this map is a most interesting article written by the Master of the State Grange, by whose efforts we all recognize this splendid record in Lenawee county has been made; Brother Horton tells "How It Was Done." We want every Patron in Michigan to read carefully this article of Bro. Horton's, and to resolve that he will do his part in bringing about proportionally good results all over the state of Michigan.

THE RECORD.

Twenty-eight active Granges, with over two thousand members, all in good working order, in one county—is Lenawee county's record. As Bro. Horton suggests, their ambition is to make it the greatest Grange county in the United States, as it is now the greatest Grange county in Michigan.

HOW?

Bro. Horton himself tells how it was done, but let us put it in our own way and suggest

1. That there was a definite plan of work. This plan was carefully matured along lines that had proved practical so far as tried.

2. There was a vast amount of hard, self-sacrificing work.

3. Those who did the work kept everlastingly at it.

In other words, Bro. Horton and his helpers abided by the very simple principle of setting a definite standard of work, and then forging ahead toward the goal in spite of all obstacles.

RESULTS.

The whole value of this work can hardly be told. The tangible results are: (1) Two thousand active, wide-awake, enthusiastic Patrons. (2) Granges are close enough together to touch elbows and receive all the benefit that comes from inter-visitation. (3) Thus the Granges help each other; the wavering Grange is strengthened, and the discouraged Grange is enthused. (4) Thus organized the Grange must be a vast power in the social, educational, and in the highest sense, the political, affairs of the county. The Grange represents the farmers as a whole, and when the Grange of Lenawee county speaks it means that the greatest interest of the county has spoken. (5) Thus united, the Grange can direct its efforts, from the mere fact of numbers, in ways that would otherwise be out of the question, such as fire insurance for instance.

THE OBVIOUS LESSON.

The plain lesson of Grange success in Lenawee county is, let us do likewise in all the other counties in Michigan. It can be done. Lenawee county is an object lesson in the power of the Grange, in the power of organization, in the value of a plan, in the necessity of hard work, and in the rewards of persistence. But all the brains and energy and self-sacrifice among the farmers of Michigan are not in Lenawee county. The same record can be made elsewhere. It will be made if a few strong men and women in each county resolve that the work shall be done. Brothers and sisters of the Grange, do you so resolve?

THE STATE GRANGE.

The State Grange convenes at Lansing next Tuesday morning. Though made up of strong men and women from all over the State, it will need their best thought and devotion if the results that should accrue from such a meeting come about. There are many things that need careful attention and thought. To our mind, there are three matters of large proportion that ought to be looked after with a special care, given special thought, and not neglected for anything else. They are as follows:

1. Concentration on a few legislative questions. We believe that the State Grange, either as a body or through its executive committee, should select two or three legislative questions for special effort, and be firm in not being led away from these special things. Let the Grange pass its opinion on all phases of legislation that are of interest to the farmers; let the Grange during the legislative session make these opinions known either for or against the various measures; but for the real hard work in the Legislature it is absolutely essential that the Grange concentrate on a few measures. The wisdom of such procedure has been proved.

2. A definite and enthusiastic plan for Grange extension. The results in Lenawee county as explained in this issue of The Farmer ought to lead the way as to plans, as well as furnish enthusiasm, for a forward movement in Grange work. The time is most auspicious for such a movement. The Grange is stronger than before for many years in this State. The farmers as a body realize as never before the meaning and value of organization. Other organizations have come and gone, but the Grange still lives and grows. No matter how useful other organizations may be, none can take the place of the Grange. The field is white for the harvest. Shall we go forth with joy to the reaping?

3. A more definite plan for uniform lecture work in Subordinate and Pomona Granges. We don't want a theoretical hard and fast plan that compels every Grange in the State to discuss the same topics on certain days in the year to the exclusion of all else, but we do need more uniformity and definiteness. It is worth while for the Granges of Michigan to make a special study of certain topics every year, and we believe that the State Grange should take the initiative in this matter and perfect a plan whereby all the Granges in the State shall thoroughly and systematically discuss a number of definite subjects during the year. The State Grange should in some way furnish material to lecturers as aids to this end. There should also be a more systematic method of reporting subjects to discuss so that all may know the general consensus of opinion on any given question after it has been discussed in the Grange halls of the State.

There are many other things that should receive attention at the State Grange, but we believe that the above are the all-important ones for advanced and decisive action.

PATRONS! YOU ARE ALL INVITED TO ATTEND STATE GRANGE.

The next session of the State Grange will be held in Representative Hall, State Capitol, at Lansing, commencing on Tuesday, December 13th, and lasting four days. It is an event that every Patron in Michigan should consider worth the time and expense to attend. The best thought, experience and results along the lines of Grange work are centered at the State Grange.

The capitol with its State departments, military museum, library, Blaisdell monument and many other points of interest are worthy of your notice. The State School for the Blind, the Industrial School for Boys, and the State Agricultural College and Experimental Farm all together make the city of Lansing during State Grange week a visiting center of rare profit and pleasure. The State Association of Farmers' Clubs will also occupy the senate chamber of the capitol at same time of the State Grange, and on the evening of Wednesday, the 14th, the State Association of Clubs meets with the State Grange as guests, and together the two State organizations of farmers will give a program of rare merit. State officers and other public men and women will also be present and take part. This meeting is planned on a grand basis and will this year surpass all former meetings of the

kind. It alone will be worthy of your time at Lansing.

A visit to the State Grange will also give an opportunity to receive the instructions of the fifth and sixth degrees in Grange work. The Michigan State Grange has the reputation of conferring these higher degrees of the Order in a very instructive manner, and this year arrangements are being made to surpass all previous efforts along this line. Fourth degree members from counties where a Pomona Grange exists can receive the lessons of the fifth degree at the State Grange and have the fee paid transferred to their home Pomona Grange and there it will pay the fee for joining in the work of the home county Grange. Fifth degree members from all over the State will be much interested in being present to witness the conferring of this degree at the State Grange this year.

The sixth or Degree of Flora will also be conferred on the same evening, immediately following the work in the fifth. This degree properly belongs to the National Grange. Permission is given the State Grange to confer it for the purpose of placing it within the reach of all Patrons, calculating that every member who receives it will become more devoted to the work of the Order. The State Grange is equipped to confer this most impressive and instructive of all Grange degrees in a very commendable form. Each person receiving the instructions of the sixth degree will be given a beautiful steel engraving illustrative of the ideas conveyed by the degree, free of cost. The engraving will be properly filled in with writing, giving name of its recipient and the time and place of receiving the lessons of the degree. All complete it is suitable for framing and room decoration as an evidence of high standing in the Order.

Fees for the fifth degree are \$1.00 for men and 50 cents for women, and for the sixth degree \$1.00 for men and women alike.

Now sister and brother Patrons from all parts of the State you are urged to lay your plans now for a visit to the State Grange. It comes at a time of year when you can best leave home for a few days, and to thus use a little time and the necessary expense of going will be as bread cast upon the water and will return to you by way of greatly increased confidence in and enthusiasm for the Grange organization, and the organization being thus made stronger will in turn benefit each of you in dollars and cents more than the cost of going to Lansing, and in other ways past reckoning.

Railroads will give one and one-third fare on the certificate plan, and an effort is being made to get one-half rates. Good board and lodging can be had at Lansing at seventy-five cents to one dollar per day in private houses, and at hotels from one dollar to one dollar and a half per day.

Let the State Grange of 1898 go into history as a notably large and enthusiastic gathering of the rank and file of Patrons from all over Michigan.

Fraternally,

GEORGE B. HORTON.

GRANGE NEWS.

Ash Center Grange, No. 471—Monroe Co.—meets at hall every Tuesday evening now, with fair attendance. Have painted the outside of our hall.—E. H. Parish, Cor.

Raisin Grange—Lenawee Co.—is in a flourishing condition. Fourth degree was conferred upon four candidates at last meeting, a number of visiting members being present. Have several more applications for membership.—N. M. B., Cor.

Tecumseh Grange, No. 166—Lenawee Co.—November 29, special meeting; had a good attendance. After a short literary program, the subject of "Town and County Government" was ably discussed. Received eight applications for membership.—Brunella De Puy, Lect.

Whitneyville Grange, No. 222—Tuscola Co.—is still adding members; are conferring degrees on a class of six and more coming. We have taken in 34 the past year. We will celebrate the 25th anniversary of our Grange January 31 next.—A. T. Dean.

Rome Grange, No. 293—Lenawee Co.—November 26th, there were visitors with us from West Adrian, Cadmus, and Four Town Granges. The third and fourth degrees were conferred on six candidates. Onsted Grange invited Rome to visit them December 3 and confer third and fourth degrees and

furnish program. The invitation was accepted.—Dora L. Dowling, Cor.

North Branch Grange, No. 607—LaPeere Co.—is getting along finely. Has meeting every Saturday night with a good attendance, and plenty of work for all. November 26 elected officers for next year. Our present very efficient Master, William Willson, was re-elected, with C. E. Barnes for secretary.—H. S. Bradshaw, Cor.

Banner Grange, No. 640—Ionia Co.—discussed free distribution of seed. All thought it was of no benefit to farmers, and the appropriation for the same should be discontinued. We are having a very interesting contest, consisting of spelling and literary work.—Cor.

Montcalm Grange, No. 318—Montcalm Co.—Our Grange is in good condition. Occasionally new members are taken in. We have been having Grange aids, but this winter we are to have Grange socials, which we hope will be a benefit to all who attend.—M. I. J.

BARRY COUNTY POMONA met with Baltimore Grange Friday, November 25. Members from a distance began to arrive about 10 a. m., and when the noon hour came there were about two hundred who surrounded the well-filled tables that had been furnished by the sisters of Johnstown, Baltimore and surrounding Granges. Afternoon session was called to order in open session by Worthy Master H. N. Bowman. Music by the Grange choir. Address of welcome by Bro. J. E. Tobias. Response by County Deputy G. R. Bowser, in words that were well received by every person present, making us feel that we had the right person in the right place.

The Kimball salary bill, the Atkinson equal taxation bill, and the advisability of a change in our state constitution, were the three most important questions before the meeting. The two former met our hearty approval and wish for their passage. As to a change in our state constitution, more time and discussion required.—Cor.

GRATIOT COUNTY POMONA GRANGE was held with Bethany Grange, November 26. On account of very rough roads and a stormy morning, the attendance was not as large as usual. But a very good time was had, and a lively interest was taken in the papers and questions presented. After the inner man had been supplied, the meeting was called to order and the Lecturer proceeded to carry out the program. Commenced with singing by Bethany Grange; a paper was presented by Bro. Charles Richards, on "International Arbitration," setting forth that it would be far cheaper for nations to arbitrate their differences than to go to war. The discussion following indicated a strong sentiment in favor of arbitration.

Bro. E. Franklin's paper, "War Against Railroads," was calculated to please those interested in railroads, claiming that the roads were the abused, and not the farmers. If we were not careful we would tax them out of existence. But the discussion following was rather hard on Bro. Franklin. Bro. Hetzman thought that the railroads were able to take care of themselves, they always had and probably always would. Bro. Burns thought that "right wronged no one," therefore, if the railroads paid their just proportion of taxes with other property the people of Michigan would be doing no injustice to make them do so. Equal and just taxation to all property, whether corporate or private, was the sentiment of the Grange.

After a recitation by Mabel Richardson, came a talk by Bro. Hetzman on "Sunday Hunting." "Remember the Sabbath day to keep it holy." He thought that was sufficient reason to keep anyone from hunting on Sunday. But those who do not care or believe in such things should not hunt, out of respect for those who do believe in keeping the Sabbath day. And those who do not care for either of the above should not hunt, for their bodies need a rest. In a discussion following, it was thought that all hunting should be done away with as a needed protection to farmers, and that there should be a law passed by our next legislature making it a fine for anyone found hunting on a farm without the owner's consent.

The question was asked, "Do we want to acquire the Philippines?" After the discussion a vote was taken, all voting in the negative except three. The next question asked was "What pays best on the farm?" Answer, doing chores if they are well done. This ended the program.—Mrs. Jennie E. Muscott, Lecturer.

"HOW IT WAS DONE."

BY GEO. B. HORTON, MASTER STATE GRANGE.

Bro. Butterfield asks me to explain to the Patrons of Michigan how it came about that Lenawee county has twenty-seven active working Granges. It is supposed that the object of this inquiry is to give other counties the benefit of this experience with its prolific results. For these purposes it is freely given and by way of prelude will say to the many other counties with opportunities equal to Lenawee, "Go thou and do likewise."

Briefly stated this large number of Granges was secured by the adoption of an open, plain

PLAN OF ACTION.

carefully, tenaciously, and in a business-like way, executed. Having a deep interest in promoting the interests of the order in Michigan because of honors conferred upon me, and a natural abiding faith in the Grange to accomplish its avowed objects, i. e., the elevation of the farmer socially, educationally, financially, and influentially, plans have been formulated and sent out from this office detailing ways and means for the strengthening of all existing Granges, reviving the dormant and organizing new ones. Experience teaches that plausible theories do not always work well in practice. So for the purpose of trying the plans recommended for others to follow in the execution of the above named work, Lenawee county was made the testing ground or experimental field to the end that none but practical rules be recommended. In saying that all organizing deputies in counties over the State can now be in possession of plain and practical, formulated and printed rules for them to follow in their work, the application of these rules in Lenawee county makes the assertion uncontrovertible.

It is understood that persons are unlike, and that equally successful men arrive at results by different ways. The fact remains, however, that the modus operandi recommended for county deputies applied in Lenawee county has been and is a success. Other plans may work, we know this one does work.

TO BE SUCCESSFUL ORGANIZERS

the man or woman so engaged must be thoroughly imbued with the justness and merits of their cause and be able to impress their earnestness upon others. They must be reasonably well informed as to the past, present, and future work of the Grange and be able in a fair and candid way to tell it to others. They must be free from exaggerated statements, pessimistic moanings, demagogical cant, and slurring partisan allusions, for it is the design of our organization to unite farmers for objects higher and more ennobling than these would indicate. At the same time the organizer must not make the mistake of going outside and above the comprehension and understanding of even the most common and plain farmers in the jurisdiction of the proposed new Grange. If you wish to interest a business man, the surest way is to talk to him intelligently about his line of business. If you wish to interest a mother, talk to her about her children. If you wish to interest farmers in organization, show them how and in what ways organization will help them as farmers, and residents of country districts. The successful organizer must not fail to

INTEREST THE MOST PROGRESSIVE FARMERS

for it is by these the Grange must be maintained and given standing in the community.

In short, Lenawee county has twenty-seven Subordinate Granges and all in good working order, holding meetings every two weeks the whole year around. Membership ranges from thirty or forty to over one hundred, and in no case are Granges so close as to materially injure the strength of each other; while on the other hand many are the cases where sufficient nearness of Granges to permit and encourage visiting at times of regular meetings have held Granges up to good and useful lines of work, when for the lack of capable leaders and this encouragement, they would have become discouraged and gone into a dormant condition. Very few persons will go over about two or three miles to Granges and attend regularly enough to be useful members. The Grange law permitting centers of Subordinate Grange jurisdiction at five miles apart is practical and for

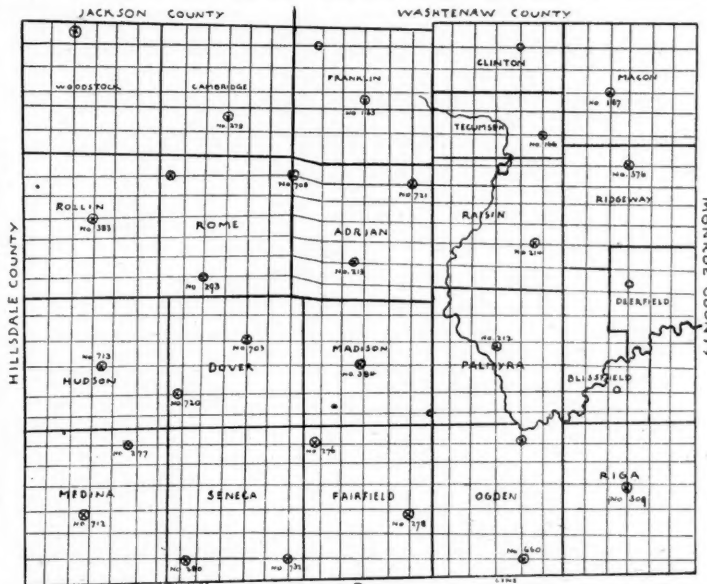
the best interests of the order. Lenawee county can support thirty Granges and each will be the stronger because of the others. Some of these additional Granges are in process of organization at this time. It is now the ambition of Lenawee county Patrons to make it tee

BANNER GRANGE COUNTY IN THE UNITED STATES

in number of working Granges, Grange halls, libraries, correct ritualistic observances, and in all good and profitable works as defined in the Grange Declaration of Purposes. Our Patrons' Mutual Fire Insurance Company is now on a sound footing, and is talking more convincingly for itself

GRANGE MAP OF LENAWEE CO., MICH.

"In Lenawee Co. it pays to be a Granger—pays socially, educationally, financially, influentially."



The following gives the names of organized Granges in Lenawee county, the numbers referring to the numbers on the map:

- | | |
|---------------------------------------|---|
| 165 Tipton (hall over a store). | 383 Rollin (proposes to build hall). |
| 166 Tecumseh (builds hall next year). | 384 Madison (owns its hall). |
| 167 Macon (owns its hall). | 599 Working (owns its building). |
| 212 Palmyra (owns its hall). | 576 Ridgeway (meets over store). |
| 213 Adrian (owns its hall). | 600 Ogden (owns its hall). |
| 214 Raisin (owns its hall). | 703 Cadmus (meets over store). |
| 276 Fruit Ridge (owns its hall). | 708 Wolf Creek (proposes to build hall). |
| 277 Medina (owns its hall). | 712 Lime Creek (owns its hall). |
| 278 Fairfield (owns its building). | 713 Hudson Center (proposes to build hall). |
| 279 Onsted (owns its hall). | 720 South Dover (proposes to build hall). |
| 280 Morenci (meets over store). | 721 North Adrian (owns its hall). |
| 283 Rome (owns its hall). | 732 Sugartown (has bought P. of I. hall). |
- The unnumbered Grange in Woodstock township is Woodstock Grange, reorganized. It proposes to build hall in near future.
- The one in Rome township is North Rome Grange, a new Grange, which proposes to build a hall.
- The one in Ogden township is Vicksburg Grange, a new Grange, which has its own building.

than its most enthusiastic members can. Our County Grange is alive to its mission and no Subordinate Grange will be allowed to sleep the sleep of dormancy. Not a single dormant charter exists in the county. The best and most influential farmers of the county do not hesitate to become enrolled as members and workers, and all think, talk and act for the Grange on all proper occasions.

It is impossible to here enumerate the names of those who have faithfully labored for this present high standard, for they are many, and they are honored and respected for their loyalty to so grand and worthy an object. The success of the order in Lenawee county is now assured, for from experience all know how to live over and above the disorganizing influences which in years gone by have done such damage among the Granges of Michigan.

As this communication may be read by many of our working Patrons, I must here add that the younger class of farmers and young people of the country in general must be interested in Grange work as well as the older ones, and to do this in a reasonable and healthful manner should be the study of every Grange Deputy and also of all our working members who seek to do that which is best for our existing Granges.

THE MAP.

This communication is accompanied by a practically correct map of Lenawee county, showing relative location of all its Granges. Each square represents a township.

Now, Patrons of Michigan, let me remind you that Lenawee county is no better than many other counties in Michigan. It has no more population to the square mile. Its people are not different from those all over the State. Its farmers are not more naturally inclined to organize and co-operate than are those of other counties. The work has not been done by outside help. It does not possess Patrons with tal-

those found in other counties. As said, and as all Patrons know, WHAT LENAWEE COUNTY HAS DONE OTHER COUNTIES CAN DO.

How many counties in Michigan will immediately resolve to make a good strong effort. For this start and work it is recommended:

1. That two or three or many working Patrons sign a call to all Patrons asking that they meet at a fixed time for conference.
2. Agree upon working together for Grange extension, and lay such plans as will when executed bring success.
3. Canvass all the Patrons of the county for a suitable person who will take the field and make a business of

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These silks belong to the Brocade, Gros Grain, Gros de Londre, Taffeta and Duchesse families and the effects are plaids, bayaderes, stripes, polka dots, bars and checks. They are the best selections of this season's manufacture.

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We knew a man once who had but two kinds of presents to give and he never varied—one year it was kid gloves, the next year handkerchiefs. Kid gloves are always staple for presents.

We have a very attractive line of women's four-button and two-clasp Kid Gloves in all sizes and all colors—browns, tans, reds, greens, yellows, navy, butter, fawn, black and white. It is a regular \$1.25 glove. Our holiday price is

\$1.00 A PAIR.

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Our Handkerchief lines are simply immense. Dainty Swiss Embroidered Handkerchiefs, scalloped hemstitched and open-work edges, 10c. From this price gradually up to \$25.00 for fine French hand-embroidered handkerchiefs.

Samples of anything we have that is sampleable.

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In most cases both papers can be had for the regular price of one. In many cases for less than the price of other agricultural papers alone.

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Only one other paper is allowed with each year's subscription to THE FARMER; as many other combinations may be taken at prices named as years subscribed for THE FARMER; for instance: THE MICHIGAN FARMER, Cincinnati Enquirer and Hoard's Dairyman are wanted for one person; the subscriber would have to pay \$2.10, but would be credited with two years' subscription to THE FARMER and one year each to the others. A person may take as many as five combinations in this way.

THE MICHIGAN FARMER and any one of the following papers one year each at prices named:

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Commercial Gazette, Cincinnati, O. .90

Enquirer, Cincinnati, O. .90

Times, Cincinnati, O. .85

Tribune, New York, N. Y. .90

Blade, Toledo, O. 1.00

Bee, .85

Post, Pittsburgh, Pa. 1.10

Dispatch, Pittsburgh, Pa. 1.10

Commercial Gazette, Pittsburgh, Pa. 1.20

Journal, Indianapolis, Ind. 1.10

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Swine Breeders' Journal, Indianapolis, Ind. .80

Ohio Poultry Journal, Dayton, O. .80

Poultrykeeper, Parkersburg, Pa. .85

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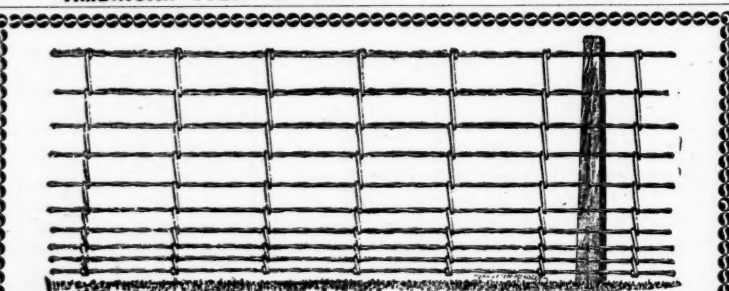
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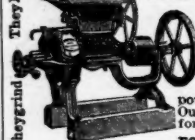
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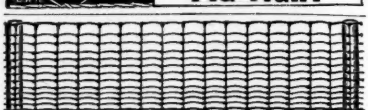
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